co.habits

co-creating a shared identity through cohabitation

Author: Katy Tsai
Advisor: Jodi Forlizzi
Carnegie Mellon University
School of Design, 2013

co.habits

co-creating a shared identity through cohabitation

A thesis submitted to the School of Design, Carnegie Mellon University, for the degree of Master of Design in Interaction Design

Katy Tsai (author) _____

Jodi Forlizzi (advisor) _____

abstract

Interested initially in how people develop and manage their identity over major life transitions, I decided to research cohabitation among unmarried couples, more specifically to understand how couples co-create a shared identity through this significant transition in their relationship. In recent years, emerging adults have increasingly turned to cohabitation as a necessary next step in determining long-term compatibility with their romantic partners. However, this transition is often marked by uncertainty and tension, as notions existing at multiple levels remain unclear and undefined.

With the high rates of marital disruption driving this trend, many couples see cohabitation as a way to mitigate chances of divorce. Nonetheless, the statistics still remain the same. Many of the existing solutions designed for couples only facilitate day-to-day coordination or address issues after the fact. To understand this design space more deeply, I conducted several interviews and in-home observations to understand the characteristics and relational implications of couples cohabiting. Drawing from my exploratory research, I created a series of concepts that were tested with users in the form of storyboards, ultimately informing my final design.

Through a human-centered design approach, I created co.habits, a comprehensive service that helps couples establish a mutual value system early in their relationship by helping them set shared goals and manage finances. By helping couples communicate more openly about their values, goals, and finances, couples can set more realistic expectations and create a shared vision of their future. While the service helps cohabiting couples reflect on and celebrate their shared achievements, it more importantly fosters the long-term planning required to keep a committed relationship propelling forward.

acknowledgments

contents

introduction

In recent years, cohabitation has emerged as an increasingly prevalent trend among young adults transitioning from singlehood to either marriage or an alternatively committed cohabiting relationship. With the onset of the sexual revolution, broader economic changes, shifting gender roles, and higher rates of marital disruption driving this trend, emerging adults are now turning to cohabitation as a practical and necessary next step in determining long-term compatibility with their romantic partners.

However, despite attempts to determine long-term compatibility and potentially mitigate chances of ultimate divorce, the statistics for marital disruption remain the same for many who cohabit prior to marriage. Many of the existing solutions designed for couples only facilitate day-to-day coordination or address issues after the fact. Cohabitation as a whole remains a relatively overlooked space in which notions existing at individual, relational, and systemic levels remain unclear and poorly defined. While this transition often marks the next stage in a couple's relationship, it triggers unique relational implications and lacks the legal safeguards that often come with formal structures like marriage.

By understanding how individuals negotiate both an individual and shared identity as they undergo this critical transition, we can perceive cohabitation as an opportunity to take a more preventative approach to forming long-term relationships. My thesis work aims to help couples recognize and identify both personal and shared goals as they work together to achieve more tangible outcomes. With the support of products and tools to help couples set and manage expectations and goals, couples can adopt a purposeful approach to a long-term relationship.

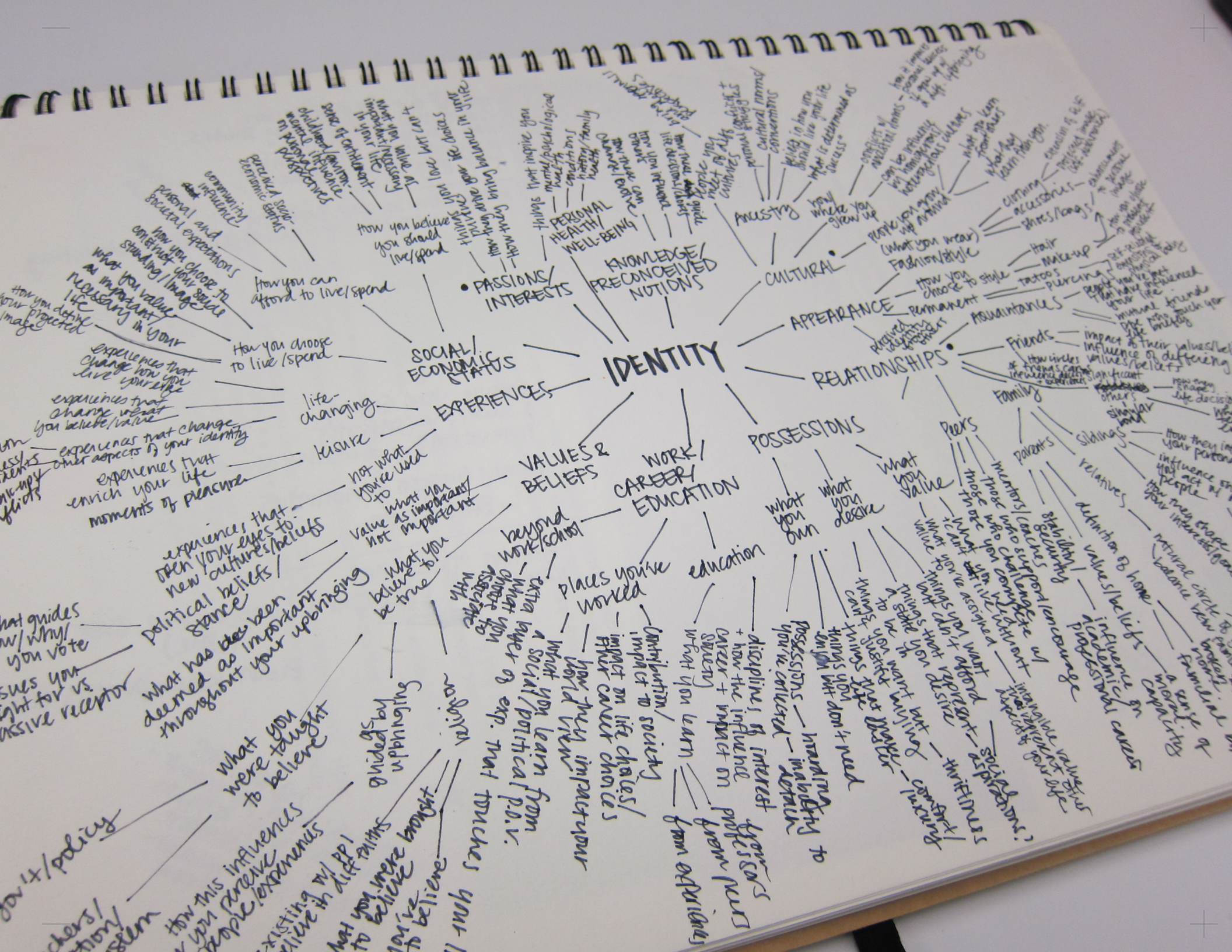# a review of relevant literature and projects

Identity Management, Role Transitions, & Sharing

My research first surveyed current work that has been done around topics of identity, role transitions, and sharing within the household.

Identity Management

In his analysis of identity, Goffman (1959) likened the presentation of self in everyday life to a theatrical performance, in which identity is constructed through the actions performed and the roles enacted. Managing one's social role involves not only managing the external projection of oneself, but also partaking in internal reflection and expectation management. Goffman claimed that a "person's social roles are the major determinant of the conception of self and social identity." Thus, to breakdown and understand "the global self" is the "sum total of all the roles that the person enacts". (Goffman, 1959)

Figure 2.1.1. To break out the multiple facets and "social roles" that make up one's identity and understand "global self", I created a mind map of the various roles a person may enact within his or her lifetime.

IDENTITY

Main branches:

- PASSIONS/ INTERESTS
- KNOWLEDGE/ PRECONCEIVED NOTIONS
- PERSONAL HEALTH/ WELL-BEING
- CULTURAL
- APPEARANCE
- RELATIONSHIPS
- POSSESSIONS
- WORK/ CAREER/ EDUCATION
- VALUES & BELIEFS
- EXPERIENCES
- SOCIAL/ ECONOMIC STATUS

SOCIAL/ ECONOMIC STATUS
- How you can afford to live/spend
- How you choose to live/spend
- How you believe you should live/spend
- perceived socio-economic status
- community inequality
- personal and societal expectations
- How you choose to construct your social standing/image
- what you value as important / necessary in your life
- How you define your projected image

EXPERIENCES
- life-changing
- leisure
- political beliefs/ stance
- experiences that change how you live your life
- experiences that change what you believe/value
- experiences that change other aspects of your identity
- experiences that enrich your life
- moments of pleasure
- experiences that open your eyes to new cultures/beliefs
- not what you're used to
- what you value as important/ not important

VALUES & BELIEFS
- beyond work/school
- What you believe to be true
- what guides how/why you vote
- issues you fight for vs.
- what you were taught to believe
- how this influences how you perceive people/experiences
- guided by upbringing
- religion
- existing in diff. realms

WORK/ CAREER/ EDUCATION
- places you've worked
- education
- Contribution/ impact to society
- impact on life choices/ career choices
- discipline & interest
- career + impact on profession
- what you learn
- from experiences
- how they impact your world view

POSSESSIONS
- what you own
- what you desire
- what you value
- possessions you've collected
- inability to your possessions — domain
- things you want but can't justify buying
- things that don't represent your desire
- thriftiness
- comfort/ luxury
- special occasions?

PASSIONS/ INTERESTS

KNOWLEDGE/ PRECONCEIVED NOTIONS

CULTURAL
- ancestry
- how/where you grew up

APPEARANCE
- (what you wear) Fashion/style
- clothing, accessories, shoes/bags
- hair, make-up
- How you choose to style
- permanent — tattoos, piercings
- required

RELATIONSHIPS
- Friends
- Acquaintances
- Family — parents, siblings, relatives
- Peers
- mentors/coaches
- those who support/encourage
- those who challenge us
- mentors/ support/encourage us
- stability/ security
- values/beliefs
- influence on academic careers
- a sense of a working capacity
- familiar
- definition of home
- natural circle

Role Transitions

Allen and van de Vliert (1984) examined current considerations in role theory to propose a framework of role transitions. They broke down the role transition process into six components, which has driven a psychological approach to understanding the major strategies and interventions possible in which to help people manage these changes and transitions. Their framework for role transitions can be adopted to understand how design can intervene in the process to change antecedent conditions, facilitate role transition, reduce strain, alter reactions, and optimize consequences. (Allen & van de Vliert, 1984)

Design Moderators

ONE.	TWO.	THREE.	FOUR.	FIVE.
Changing Antecedent Conditions	Facilitating Role Transition	Reducing Role Strain	Altering Reactions	Optimizing Consequences

Antecedent Conditions	Role Transitions	Role Strain	Reactions	Consequences

Sharing

Examining sharing in the context of possessions, money, and rituals, Belk (2010) pointed to sharing as a "communal act that links us to other people...[going] hand in hand with trust and bonding." Within a household, families are bound by "shared family identity." However, unlike married couples who tend to retain greater shared ownership, cohabiting, unmarried couples tend to hold a more individualistic perspective on ownership over their possessions, income, and money management. Helping cohabiting couples adopt strategies for sharing can help drive "feelings of solidarity and bonding" needed to form the long-lasting commitment they hope to achieve. (Belk, 2010)

Figure 2.1.2. Allen and van de Vliert's framework for understand role transitions can be adopted in the context of design, in which various concepts and solutions can serve as moderators to intervene and strategically tackle the challenges of role changes.

Have you ever lived with a partner without being married?

NEVER LIVED
WITH PARTNER
56%

HAVE LIVED
WITH PARTNER
44%

LIVING WITH
PARTNER NOW
8%

What do you think of these trends?

← Bad for society   Good for society →

MORE PEOPLE LIVING TOGETHER WITHOUT GETTING MARRIED

43%   **9%**

Current Landscape of Cohabitation

Recent trend reports released by the Pew Research Center (2010) and TIME Magazine (2010) spoke of the rising trend in cohabitation before marriage. 44% of adults (and more than half of 30- to 49-year-olds) mentioned they have cohabited at some point, and nearly two-thirds (about 64%) of adults who ever cohabited said they viewed cohabitation as a step toward marriage. Although much research has shown that couples who live together prior to marriage are more likely to divorce than couples who do not, the increase in cohabitation now contends with that conclusion.

However, a "marriage gap" has emerged as adults with college educations and solid incomes are notably more likely to be married than are adults with less education and lower incomes. While couples can be driven to cohabit for multiple reasons, including economic struggles, college-educated couples tend to perceive living together more as a "warm-up run before the marital marathon" rather than those without a college degree, who "tend to do it the other way around—move in together, have kids and then aim for the altar". (Pew Research Center, 2010; Luscombe, 2010)

With almost 50% of adults having cohabited, cohabitation is becoming an increasingly prevalent life transition in today's society. However, although it is not necessarily true that couples who live together prior to marriage will get divorced, cohabitation still does not translate into marital success.   In addition, the emerging "marriage gap" shows that aside from a lack of resources, there is a significant discrepancy in how cohabitation is valued and perceived. Much of society now views cohabitation as an important step towards marriage, but there is no clear consensus of what it means for those involved and how it should unfold.

COLLEGE-AGE COHABITERS

Dating shifts its focus from social interaction to consideration of possible marriage partners (intimacy vs. isolation)

TYPOLOGIES OF COLLEGE-AGE COHABITERS

Linus-blanket cohabiters

Avoiding romantic isolation

Emancipation

Seek freedom from parental constraint

Convenience

Shared duties and experience

Any of the 3 types can transition into "testers"

PRENUPTIAL COHABITERS

Marriage is planned, but precise timing is uncertain.

These relationships could also be described as "post-engagement" with a mutually agreed upon list of life accomplishments needing completion before marriage.

50% of cohabiting couples begin living together post-engagement and see themselves as definitely marriage-bound.

TESTERS

Marriage is a possibility, but pre-engagement cohabitation becomes a "test" of a couple's compatibility as they "slide" into cohabitation.

DRIVERS OF THIS TYPE OF COHABITATION

EVENT-DRIVEN
(i.e., job loss)

RELATIONSHIP DRIVEN
(i.e.,final step of dating)

ALTERNATIVES

No interest in marriage, either to specific partner or in marriage as a social institution.

More often post-divorce or widowhood, with those wanting a companion and romance without merging finances or marital failure.

CONCERNS OR FEARS THAT DRIVE CHOICE

Fear of long-term commitment.

Unwillingness to assume partner's debits.

Fear of being tied to partner's psychological problems.

Unwillingess to share inheritance with someone of more modest means.

Psychological & Sociological Perspectives

Existing research in sociology and psychology pointed to current research themes, findings and implications related to cohabitation, outlining key differences between married and unmarried couples.

Shared Beliefs & Union Stability

Hohmann-Marriott (2006) examined shared beliefs about division of household labor as a contributing factor to union stability among both unmarried cohabiting couples and married couples. Although individuals who cohabit hold more egalitarian beliefs about the division of household labor than those of married couples who tend to base their relationship more on traditional, gendered division of labor, it is not the beliefs themselves that affect stability. Rather, it is the similarity between the two individuals and their shared beliefs that influence the stability of their relationship. (Hohmann-Marriott, 2006) While the study pointed out potential differences in the beliefs of married couples and unmarried cohabiting couples, it emphasized the importance of ideology fit and co-creating a "shared belief system." (Ross & Mirowski, 1984; Wamboldt & Reiss, 1989)

Typologies of Cohabitation

Gold's (2012) overview of the current evolution and research in cohabitation provided background and recommendations for clinical studies by outlining the three main typologies of couples who cohabit: prenuptial cohabiters, "testers", and "alternatives". This typology was adopted to create the framework for the profiles outlined in my research. Gold further outlines the major implications unmarried cohabiting couples face, outlining challenges at individual, interrelational, and intersystemic levels. (Gold, 2012)

Figure 2.3.1. These models summarize the key characteristics and distinctions outlined in Gold's overview of cohabitation and the main typologies of cohabiters.

Relevant Design Research & Concepts

To benchmark existing concepts and research relevant to cohabitation, I surveyed solutions catered towards counseling or advising couples, enhancing their romantic relationship, and facilitating shared living.

Designing for Couples

Bilotta (2013), cofounder and chief product officer of Avocado, outlined five main tips for designing mobile experiences for couples: 1. Test and research to understand couples' unique needs, 2. Keep it neutral, as every couple is different, 3. Make it fun, not another chore, 4. Find a digital way to capture all those little nonverbal moments, 5. Allow room for growth. (Bilotta, 2013)

Content Sharing Between Couples

Many of the existing solutions designed for couples facilitate coordination and content sharing, centering on creating and documenting shared experiences.

Sharing Experiences

HowAboutWe [http://www. howaboutwe.com/] is an online membership service that targets both singles and couples by recommending date activities and experiences through a monthly DateBook.

Sharing & Creating Content

Avocado [https://avocado.io/] is a mobile application that keeps couples stay connected through chat, lists, calendars, sketches, photos, and more. To keep things playful, Avocado includes stickers, "hugs and kisses", and customized emoticons. *(See also: SimplyUs, Couple, Google Docs)*

Coordination & Scheduling

Google Calendar [https://www. google.com/calendar] allows users to share their calendars with others, send invitations and track attendance, get reminders, and sync with other devices. *(See also: Wunderlist 2)*

Shared Living Solutions

Embedded Technology & Generative Art

Tableau Machine is an AI-based interactive, visual art generator for shared living spaces featuring a display and an attached printer that interprets a living space, as detected by its sensors. Designed as an alien presence, Tableau Machine leverages data visualization and generative art to convey an expression of the living space it monitors through complex images and image analysis. (Smith, Romero, Pousman, & Mateas, 2008)

Shared Living Spaces

Social Apartments [http://www.social-apartment. com/] come fully equipped with furniture and electronics in all the common areas, while providing residents with a personal bedroom for privacy and comfort. Social apartments can provide unmarried cohabiting couples upgraded living by sharing in the commons with other couples. Shared living solutions with other couples can foster a unique social environment, while allowing couples to still have their private spaces and cut down on expenses.

Assessment Tools

Conversation Prompts

Love Map Cards [http://tinyurl.com/c4bjsmv] provides questions and "opportunity cards" to enable partners to connect and build intimacy and understanding. Card decks can be a quick and easy way to probe couples and stimulate conversation as they begin to establish a shared identity. *(See also: IceBreak for Couples)*

Conflict Resolution

Fix A Fight [https://itunes.apple.com/us/app/fix-a-fight/id376117430?mt=8] guides couples through conflicts with a step-by-step process. The application tracks progress through individualized reports and check-ins, which can reinforce behavior over time and provide personal insights to those in the relationship.

Amicable Divorce Planning — Find immediate solutions to immediate issues

Sustainable Co-Parenting Planning — Detailed look at what's best for kids and parents

Parenting Agreement — Create a transition plan that works for everyone

Financial Mapping — Understand community property & cash flow

Financial Agreements — Establish clear financial needs & expectations

Divorce Settlement — Review & sign final documents

Figure 2.4.1. Wevorce helps its customers transition from marriage into divorce through a six-step process addressing the emotional, financial, and legal implications of ending a marriage.

Legal Implications

The Current Legal Environment

In her analysis of the complex legal challenges around cohabitation, Probert (2009) pointed to viewpoints in favor of and against providing the same legal rights to unmarried couples cohabiting as couples who are married. She examined arguments from both angles, possible scenarios, and provided an overview of current legal solutions in premarital contracts, property law, and family law. (Probert, 2009) The complexities within the current legal environment calls for a workaround for cohabiting couples who are seeking to protect themselves with the similar legal safeguards afforded to married couples.

Legal Aid Resources

Life Management [http://www.lifemanagement.com/fsa14.1.1795/] is an online resource for life transitions featuring resources for divorce and separation issues. The web system provides resources for a series of transitional topics including cohabitation by giving real-life examples, explaining potential scenarios, key terminology, and agreement options.

Divorce Solutions

Wevorce [http://wevorce.com/] is a six step legal service targeted at helping families transition through divorce by addressing emotional, financial, and legal implications of ending a marriage. Spouses are guided by a single attorney-mediator rather than two attorneys, an approach that often results in more conflict and tension.

Value Assessment, Goal Setting, & Financial Planning

To design the final concept, I benchmarked and referenced existing financial solutions, individual and shared goal setting methods and services and value assessment systems.

Financial Solutions

Finance Management Tools

Mint [https://www.mint.com/] provides a free, simple way to organize, categorize, and manage personal finances and investments. Users can link bank accounts, loans, investments and properties to track spending, manage budgets and goals, visualize trends, and discover ways to save. The service also visualizes financial information to facilitate personal budgeting. *(See also: Simple, Google Docs - Sheets)*

The Joint Bank Account

In a recent Fast Company article, Cheng (2013) provided a critique of the current banking system's impersonal approach to a joint bank account. She provided four major recommendations to bridging the gap between a bank's business goals and its customers' personal goals: (1) make the materials beautiful, (2) gamify the online experience, (3) establish a thoughtful onboarding experience, and (4) create a couples-only rewards program. (Cheng, 2013)

Figure 2.5.1. Mint.com makes tracking spending and managing finances easier for its customers by helping them visualize their information through a straightforward, easy-to-use interface.

Goal Setting Approaches

SMART Goal Setting

Kovac (2005) described the characteristics of effective goal setting to be **S.M.A.R.T.**

Specific	*(or Significant)*
Measurable	*(or Meaningful)*
Attainable	*(or Action-Oriented)*
Relevant	*(or Rewarding)*
Time-bound	*(or Trackable)*

To ensure couples follow through with the shared goals they establish, they must think through the criteria for setting SMART goals.

Goal Setting Tools

GoalsOnTrack [http://www.goalsontrack.com/home] and **Lifetick** [http://www.lifetick.com/] provide robust goal tracking systems positioned to facilitate SMART goal setting. GoalsOnTrack features categories, deadlines, and motivational photos that can be played in a slideshow to help users "subconsciously find ways to achieve [their] goals." Lifetick provides mobile access and helps users establish core values, which heavily tie to their goals.

Setting Shared Goals (with a partner)

In his article from Psychology Today, Dr. Goldsmith (2010) emphasized the importance of setting goals in a relationship to create a direction to move towards and establish a strong connection. He argued that happiness is derived from moving towards what one wants, which can be done through setting goals that are in alignment with each other and with each individual's values, creating SMART goals, supporting each other through these achievements, and documenting and renewing goals. *(Goldsmith, 2010) (See also: Hamm, 2010; Coopersmith, 2010)*

Implementation Intentions

Gollwitzer (1999) explained implementation intentions, or setting goals, as "committing oneself to reaching desired outcomes or to performing desired behaviors". He discussed the problems often associated with getting started, as well as persisting and successfully implementing one's intent. His research provided insight into the triggers, obstacles that may occur, and formation of habitual responses, which are important considerations in enabling achievement of shared goals. (Gollwitzer, 1999)

Figure 2.5.2. Both GoalsOnTrack (top) and LifeTick (bottom) provide robust systems to help individuals create and manage S.M.A.R.T. personal goals. Their modular designs provide quick overviews of progress and general goal activity.

Life Values	Operational Values
Achievement	Accountability
Adventure	Affection
Aesthetics	Autonomy
Community	Competency
Equality	Courage
Fame	Courtesy
Family	Creativity
Freedom	Discipline
Fellowship	Drive
Happiness	Fairness
Health	Flexibility
Love	Forgiveness
Nature	Honesty
Peace	Humor
Pleasure	Knowledge
Power	Loyalty
Self-worth	Obedience
Social Service	Order
Spirituality	Reason
Wealth	Service
Wisdom	Tolerance

Figure 2.5.3. In Golden's Values Arrangement List, Golden determines 21 life values and 21 operational values that are designed to help people establish their core value system.

Establishing A Shared Value System

In his Values Arrangement List, Golden (2002) provided a method of establishing personal values through a set of 21 life values cards and 21 operational values cards that the user must sort and evaluate to redefine how the values fit into their lives. (Golden, 2001) Golden's comprehensive set of values can easily be discussed and shared among couples to establish values by which they can achieve both their long-term aspirations, as well as how they want to carry out their everyday experiences.

process & approach

The goal of my thesis is to understand how people deal with issues of identity as they undergo major life transitions. Cohabitation was selected as a more narrowed topic of my general research interests as it poses a unique, often overlooked, transition that requires two individuals to merge their individual identities into one that is shared and co-created.

Figure 3.1.1. Research participant showing items from his "man cave" (top), participant talking about the couple's collection of artifacts from their relationship (middle), participant explaining the items from the card sorting exercise (bottom).

Exploratory Research

To understand this space further, my literature review and secondary research looked heavily at current research on identity and role transitions, current trends and statistics around cohabitation within and outside of the U.S., and sociology and psychology research regarding the types of couples who cohabit and the underlying implications and challenges individuals in these relationships face. Examination of current research was necessary in identifying broader trends in identity management and role transitions to solidify cohabitation as an important area of study within today's society.

While psychological research laid the basis for my exploratory research, conducting in-depth interviews with couples provided a more contextually rich look at their experiences cohabiting. A three part, in-depth interview helped me understand how couples begin to merge their lives together:

- A **combined interview** with both members of the couple to understand the context and background of the couple's relationship.

- Individual interviews using **directed storytelling**, the **critical incident technique** and **card sorting** gave context to each person's upbringing, individual goals, challenges faced with cohabitation and each person's future outlook on the relationship.

- An **in-home touchstone tour** explored how the couple has merged their possessions and living habits in one shared space.

Figure 3.2.1. Storyboards used to conduct user validation research in the speed dating process.

Generative Research

Through my research findings, I identified four key design opportunities in which to intervene. From there, I generated six concepts that addressed the different needs revealed through exploratory research. Through a speed-dating process, I created and tested the concept storyboards, which told a narrative of how my proposed concepts would exist in context of a couple's life. To get a broad spectrum of feedback, I tested these storyboards with couples that fell within one of the three profiles, as well as couples who have considered or transitioned out of cohabitation. The concept storyboards were tested online through crowdsourcing and in person. Overall, the generative research phase helped me understand which needs and solutions resonated with couples to consider the direction with which to ultimately move forward.

Drawing from the feedback and suggestions provided from the speed-dating research, I focused on creating a system to help couples create shared goals and manage their shared finances. I followed up with a few of the participants who had participated in the speed-dating research to talk to them about the type of goals they share with their partners, how they create those goals, and how they manage their day-to-day expenses and finances.

Evaluative Research

To evaluate the final concept developed, I created low-fidelity wireframes in the form of paper prototypes printed in black and white. I conducted think aloud exercises and usability studies, in which I walked through the prototype with potential users and listened to their thoughts and feedback regarding how goals were set and monitored, how they would flow through information and content, and how they would use the system to track their finances, assess each other's values, and achieve shared goals.

After the first round of validation, I skinned the wireframes and added visual elements to test the initial setup process and overall look and feel of the prototype. Using the clickable prototype, potential users walked through the initial setup process and navigated through the system. This round produced feedback on many of the interactions that were presented and the overall desirability of the product. Although usability tested as less of a setback, the emotional resonance and desire to interact with the system was an important factor in creating a service that would become tied so personally with users' lives.

The final round of testing involved a combination of A/B testing, where multiple versions of pages were shown side by side to identify preferred visual styles, layouts, and interactions, and the critical incident technique to gain a more qualitative assessment of the different layouts. Letting users explore more openly allowed them to imagine themselves using the system on a normal basis. This, coupled with the features of the overall concept was important in completing the bigger picture and testing the viability of the product within a cohabiting relationship and household.

Figure 3.3.1. Findings from the think aloud tests conducted with paper prototypes (top), research participant evaluating a certain version of the design concept in A/B testing.

research & exploration

User Interviews & In-Home Observations

In the initial research and exploration phase, I visited the Pittsburgh homes of seven couples and one individual who had recently ended a cohabiting relationship to understand their stories and observe the homes they have created together. Although I chose to specifically target young adults ranging from 25 years old to 35 years old, I broadened my scope for exploratory research to gain perspectives at multiple life stages.

RESEARCH PARTICIPANTS

Couple A started dating in Jan. 2011 and have been cohabiting for 1 year and 2 months. They are currently unmarried and cohabiting.

A1:   M / 26 / PR & Customer Care
A2:   F / 26 / Baker & Customer Care

Couple B started dating in Jan. 2010 and have been cohabiting for 1.5 years. They are currently unmarried and cohabiting.

B1:   F / 26 / Web Designer
B2:   M / 26 / UNIX Operating Systems Engineer

Couple C started dating in Apr. 2008 and cohabited for 1 year. The are no longer in a relationship.

C1:   F / 31 / Environmental Non-profit Worker

Couple D started dating in Aug. 2010 and have been cohabiting for 1.5 years. They are currently engaged and cohabiting.

D1:   F / 25 / Non-profit Professional
D2:   M / 34 / Non-profit Professional

Couple E started dating in Jul. 2009 and have been cohabiting for 1.5 years. They are currently unmarried and cohabiting.

E1:   M / 26 / Civil Servant
E2:   M / 28 / Policy Analyst

Couple F started dating in Jul. 2009 and have been cohabiting for 2.5 years. They are currently unmarried and cohabiting.

F1:   F / 34 / Database Developer (previously divorced)
F2:   M / 41 / Research Programmer

Couple G started dating in Nov. 2009 and have been cohabiting for 1 year and 2 months. They are currently unmarried and cohabiting.

G1:   F / 43 / Administrative Coordinator (previously divorced)
G2:   M / 44 / Senior Histotechnician (previously divorced)

Couple H started dating in Jan. 2009 and have been cohabiting for 4 years. They are currently unmarried and cohabiting.

H1:   F / 27 / Childcare and Student
H2:   M / 31 / Migrant Education Recruiter

PART 1.

Combined Interviews

Through a combined 20-minute interview, couples shared the story of their relationship, including how they met, how they decided to move in together, and how they discovered and set up their home.

PART 2.

Individual Interviews

Through **directed storytelling** and the **critical incident technique**, the 45-minute individual interviews gave participants an opportunity to talk more deeply about their personal motivations and goals, their upbringing, both the benefits and challenges of cohabitation, and their future outlook on the relationship.

Couples then conducted a **card sorting** exercise, thinking through some of the common topics they often encounter and evaluating how they have changed as a result of cohabitation.

PART 3.

In-home Observations

The research session ended with a touchstone tour of the couple's home, during which the couple shared how they use each room, designated shared and personal spaces, individual and shared possessions, and the significance of various items.

Research Findings

Progression Towards a Shared Identity

Ultimately, I discovered that along this continuum of categories, cohabitation drove couples to merge certain aspects of their lives more quickly and readily than others. Topics like social life, physical space, and habits and routines were among the challenges they constantly had to deal with as a couple.

On the other end of the spectrum, topics like family, health, and finances remained relatively unchanged, as they involved a longer trajectory of planning and were not issues they were actively facing each day.

Additionally, while the intent of cohabitation for a couple is to test compatibility on all levels and to ultimately form a shared identity together, the unique legal implications of cohabitation made couples more hesitant to fully merge every aspect of their lives. Finances, for example, were an uncomfortable topic for many couples interviewed, as cohabitation required sharing expenses, but many were hesitant about merging finances or creating a joint account. Interestingly, many individuals cited that establishing financial stability together would be critical in moving onto the next stage of their relationship.

progression towards a
shared identity

"Things are definitely better...she's got artwork and a lot of cool stuff."

"He's a really good person to talk to about my career."

"I've gained a whole new family."

"We don't have a joint bank account, that's scary!"

"I eat a lot of kale now."

individual identity

Family   Health   Careers   Finances   Possessions

"Definitely a change...you have to consider the person who is waiting for you at home."

"Before it was more nebulous, but now we can focus on what we want to do in the future."

"It's a complete change from before, but it's definitely a change for the better."

"There are friends I just don't see anymore..."

"This was important for us to stay together."

"I want to have money saved up."

"This is my man cave..."

"I pretty much took his..."

Future
Outlook

Schedules &
Time

Social
Life

Physical
Space

Habits &
Routines

Values &
Beliefs

shared identity

Profiles of Cohabiting Couples

To build off of some of the typologies introduced in my literature review, I drew from my primary research to extend the attributes outlined previously.

	Going to the Chapel	Testing the Waters	On the Road Less Traveled
Marriage	Marriage is planned and discussed, but the precise timing of the event is uncertain.	Marriage is a possibility, but cohabitation becomes a determinant of a couple's compatibility.	There is no interest in marriage to the specific partner or as a social institution, or it is not legally an option.
Characteristics	Falls in the "postengagement" category as marriage is contingent on a mutually agreed upon list of life accomplishments.	Often event-driven (e.g., job loss) or relationship-driven (e.g., perceived as the final step in dating) as couples "slide" into cohabitation for convenience or finances.	Companionship and a romantic relationship is desired without merging finances or risking marital failure, especially among the divorced or widowed.
Establishing a Shared Identity	Establishing a shared identity is consciously considered and outlined to prepare for marriage.	Establishing a shared identity requires constant negotiation of roles, habits, and expectations.	May be inevitable, yet each individual prefers the sexual, domestic, and legal freedoms of cohabitation.
Future Outlook	More clearly defined as outcomes are dependent on completing milestones (e.g., paying off loans).	Marked by an implicit tension as decision to marry or end the relationship remains uncertain.	Open-ended, as it typically is agreed upon through consensus on expectations and intentions.

Understanding the Transition for Couples "Testing the Waters"

The majority of unmarried couples cohabiting, as well as the couples I interviewed, fall under the profile of "testing the waters". To delve deeper into how the transition unfolds for that specific profile, I mapped out the distinct shifts in characteristics based on my user interviews and observations. This process brought to light key trends among the couples I interviewed, as well as highlight potential design implications and opportunities.

	PRE-COHABITATION	COHABITATION	MARRIAGE
Habits & Routines	The majority of the couple's time is spent at one domicile over the other with the accumulation of one person's possessions in the space to make shared time easier.	Habits and routines are re-established to accommodate each other's schedules, preferences, and interests, often resulting in one person taking on habits and routines of the other.	The fit between a husband's and wife's ideology regarding expectations for household division of labor should be consistent, as it is extremely important to marital satisfaction.
Social Life	While time is often spent with mutual friends, those peripheral to the couple's social circle may hang out separately with one or the other.	The majority of the couple's time is spent with a shared social circle whose interests coincide with that of the couple. Those that don't fit into the shared social world tend to be seen less.	Those who might not otherwise marry if not already living together may feel social constraints of pressures to get married, limiting the time non-married couples spend with married couples.
Finances	Finances remain independent, excluding the expense of dates and one-off or casual purchases. These costs are usually split amongst the couple or taken on by one person.	Financial gain is more clear as resources and expenses are now shared, but income is typically not merged, as it implies a certain level of commitment for the relationship.	For those who might not otherwise marry if not already living together, financial constraints can increase the chance of marriage. However, for those considering marriage, establishing financial security often drives marriage.
Family	Focus is on developing the relationship with each other and gaining approval from one another's families before taking the next major step.	Direct relationship with one's family may not change, but a stronger relationship typically emerges with the family of the significant other.	As both sides of the family are now integrated, focus of the family shifts to establishing a shared household identity for which a family can develop.

Implications of Cohabitation

While the literature cited several implications of cohabitation for clinical practice (Gold, 2012), the interviews demonstrated that these implications were important to consider from a design perspective as well. These implications look at how cohabitation impacts the individuals involved at individual, relational (within the relationship), and societal (outside of the relationship) levels.

Figure 4.2.2. Research participant doing a card sorting exercise (left), a couple posing outside of their house (middle), participant showing their storage space in the basement (right).

Figure 4.2.3. A conceptual diagram to understand the implications occurring at multiple levels for a person in an unmarried, cohabiting relationship.

Individual level

Notions. Relationship is based on love and commitment, not any legal constraint against leaving, but under what circumstances would the relationship be considered a sufficient enough "failure"?

Concerns. Individuals negotiate the need for independence, priority of career, decision to delay parenting (until or if union becomes legal).

Interpersonal level

Notions. While most persons hold preconceived notions of husband-wife roles, no such notions exist of live-in boyfriends and girlfriends.

Concerns. Expenses are shared without merging financial assets; single friends are sacrificed, yet connections to married couples are excluded.

Intersystemic level

Notions. Cohabiting relationships lack formal recognition by the legal system, medical providers, and health insurance companies.

Concerns. In the case of relational dissolution, there are no legal safeguards for either party or no legal recourse for how to divide assets, address child care issues, etc.

prototypes &
evaluations

GENERATIVE RESEARCH
Storyboards, Speed Dating & Crowdsourcing

To test out the concept directions generated from the exploratory phase, I developed 6 concept storyboards illustrating how the concepts might fit into various scenarios for a round of speed dating with potential users. I conducted needs validation sessions with over 20 people by crowdsourcing online and through in-person interviews offline. This helped guide the transition into concept implementation and user evaluation.

The concepts fell under four major opportunity areas:

- Tracking & Coordination
- The Service of Cohabitation
- Cohabitation as Design
- Transition Planning

Figure 5.1.1. Concept storyboards were shown to user participants both online and offline in a series of needs validation interviews.

Financial Planning System
Target Profile: Going to the chapel

A discrete financial planning system that helps couples establish financial stability at a pace that is comfortable for them.

Deliverable

A web service accessible through multiple channels and devices including smartphones and tablets.

Needs Addressed

- Removes tension within the relationship around discussing and sharing finances
- Establishes a longer-term financial plan and financial security discretely, without having to open a joint bank account right away or merge finances legally

Key Findings

- Concept can be combined with the tool for goals and expectations setting into one concept that focuses on setting short and long term goals
- Should be less systematic and focused on equal division of all expenses and bills

With 8 months until the wedding, Jess logs into the financial planning system she and Sam have set up to ensure they are meeting their goals to pay for the wedding and the new car they've been saving up to buy.

They started using the system a few months after they moved in together. Sam thought it would be a convenient way to take care of shared expenses without having to completely merge their finances.

Each month, a portion of their paychecks gets redirected into their joint bank account which is linked to the system. It has made taking care of shared expenses really convenient.

Having a non-binding financial plan makes them more secure about their financial health. Jess can also check contributions discretely to see how they are meeting their goals.

Role Setting Through Visualizations
Target Profile: On the road less traveled

A role setting visualization system used embedded technology in the home to track household roles and coordinate schedules

Needs Addressed

- Increased transparency to promote awareness and appreciation, as well as feedback for behavior
- Promotes more egalitarian role setting among those "on the road less traveled"

Deliverable
Embedded technology within the household displaying data visualizations and generative art

Key Findings

- Could allow for discussions to occur more organically, but it should blend into the environment in a less obtrusive way if guests are over

Marie and Dave have been living together for about 8 months now. They're getting used to living together, but they both dread cooking dinner. Today, Marie finds out it's her day to cook.

Feeling like she's been cooking a lot lately, she checks the visualization system. Realizing she was wrong and that Dave had been picking up the slack for the past few days, she quickly starts scanning for recipes.

To show Dave her appreciation for his taking up extra chores around the house, she decides to make his favorite dish, lasagna!

After, she adds her contribution to the system just to keep a record and make sure they're sticking to a balanced diet. Together, her and Dave enjoy their meal and talk about their days at work.

The Service of Cohabitation

Recognizing and servicing cohabitation on a broader scale by catering specifically to unmarried, cohabiting couples

Shared Housing Community

Target Profile: Testing the waters

A shared housing community among couples developing a shared economy in common areas and household chores with the privacy of their own living units.

Deliverable

Service blueprint, experience journey, online web system to facilitate coordination and communication

Needs Addressed

- Building a shared network of cohabiting couples
- Gain personal space, while gaining a flexible payment plan to manage financial planning
- Recognize cohabitation at a systemic level

Key Findings

- Confusion around the structure and layout of the concept--people were concerned about privacy and complication of more roommates
- Hesitation about having too many people in a shared space, citing the community would be too "social"

Emily is in the shared, fully-stocked kitchen space with a few neighbors preparing their weekly group dinner. They are usually all busy, but they try to organize something together once a week, usually on Friday nights.

Meanwhile, Joseph is on his laptop finishing up some work in one of the workspaces. He appreciates having some personal space from time to time, but is looking forward to dinner with the entire group.

Tonight's dinner celebrates Gina and Tom, who just bought a new house. The flexible payment model of the housing community has helped them transition to a house they normally wouldn't have been able to afford.

After dinner, Emily and Joseph head back to their own apartment unit to watch a movie together and spend some quality time together before heading to bed.

Legal Advice & Counseling System
Target Profile: On the road less traveled

An online system providing couples in domestic partnerships with the assistance and resources to ensure legal safeguards typically protected by marriage are met.

Needs Addressed

- Pro actively managing and anticipating potential consequences of major transitions or decisions
- Addressing and defining roles and expectations within the relationship

Deliverable
Web service assisting a legal services clinic or advisor, templates, informational pamphlets or documents

Key Findings

- More relevant for people who are much more serious in their relationship
- Many do not feel compelled to take legal precautions; the concept may need to bring awareness and prompt people to take action

After living together for 2 years now, Adam and Aaron decide to take the next step and purchase a house together. Since Aaron makes a little more, he ended up contributing more of the share to purchase their home.

While very appreciative of Aaron's contribution, Adam feels they should draft a property agreement to ensure they're both protected and accounted for legally, should anything happen to either of them.

They go to the legal advice system and find some property agreement templates that they can use. However, they decide to seek legal advice in person just to be sure they get everything right.

They meet with a legal advisor, who talks them through the property agreement and answers their questions. Although Adam doesn't anticipate any major issues, he is glad they have contingency plan set up.

Cohabitation As Design

Adopting common design methods to help couples co-create and iterate as they design the relationship they desire

Cohabitation Toolkit

Target Profile: Going to the chapel

A cohabitation toolkit uses design research methods to promote iteration and codesign in building a shared identity.

Needs Addressed

* Mitigating consequences of role transition through open discussion
* Setting expectations up front to moderate the transition and reduce role strain

Deliverable

Physical and digital artifacts including method cards, maps and diagrams, collage or modeling kits, etc.

Key Findings

* Could be more useful in determining if a couple is ready to enter into cohabitation
* Heavier topics could come at later phases
* Should blend into the house if guests are over

After dinner one night, James and Sandra sit down at their kitchen counter to enjoy a glass of wine together. They grab some coasters from the cohabitation toolkit they received from a friend.

The cohabitation toolkit contains different in-home products designed to be embedded within their home to remind them to think about some of their longer term goals as a couple.

Tonight, one of the questions relates to their career goals. James mentions moving to a city with more startup opportunities, so he can get more experience managing a product.

Eventually, they start discussing the possibility of moving to San Francisco together, where Sandra would find more opportunities as a Web Designer. They continue to explore the topics on the coasters.

Transition Planning
Helping couples deal with the implicit challenges that arise from moving into and out of cohabitation

Transition Planning System
Target Profile: Testing the waters

A system focused on goal-setting and outcome expectations by encouraging couples to set and revisit goals periodically.

Deliverable

A web service providing access through multiple channels and devices like smartphones and tablets.

Needs Addressed

- Actively co-constructing a shared identity in topics that take longer to merge
- Set expectations early on by opening and triggering communication

Key Findings

- Could be combined with the financial planning system to focus on short and long term goals
- Can exist as part of the household as well—less reliance on input with more flexibility for changes

Josh and Amy were both hesitant about moving in together, but it just seemed to make sense for them. They decide to try out a new system recommend by Amy's friend Angela and her fiance.

During her lunch break, Amy spends some time to thoroughly fill in her profile, assessing her various goals, ambitions and other topics that are important for her and Josh to think about long term.

After a little nudge from Amy, Josh does the same. They synch up their 5 year time line to get a sense of where they match up and don't. They talk about each other's life goals, and start setting some goals together.

After about 9 months, Amy gets a reminder about her goal to save up for a house. Ultimately she hopes to move into something more permanent. She puts in an action item to talk to Josh about it at dinner.

Overall Feedback

While concepts like the shared housing community and legal advice system presented scenarios that were more unique and a bit more challenging for users to resonate with, many felt like they could identify more strongly with some of the needs addressed in the other four concepts: the financial planning system, cohabitation toolkit, role setting through visualizations, and transition planning system. Many of the research participants also indicated combining many of the concepts as well. For example, some couples could see themselves setting financial goals together more so than some of the softer relationship milestones.

Many of the critiques also brought to light the unique relational needs of couples. Users pushed the concepts to be less systematic and robotic, less reliant on heavy user input and micro-managing, and less focused on streamlining and dividing tasks and finances down the middle. While they recognized how technology could help them in their relationships, many couples felt it was important to have interactions that were organic, more personal, and enabled flexibility and change. They didn't want information to overwhelm and stress them out more, rather they saw it as opportunity to be inspired and talk about shared goals together.

Design Recommendations

To capture the feedback and suggestions from the needs validation sessions, I created a set of design recommendations to keep in mind as I began developing the final concept.

1. Interactions should be organic and personal, rather than systematic and robotic.
2. Less focus on equal division of finances and task contributions, and more focus on completing shared goals and tasks.
3. Less reliance on input and structure, and more opportunities for topics and discussions to occur organically and allow change.
4. Less focus on tracking and keeping tabs, and more focus on showing appreciation through awareness.
5. Topics of discussion should inspire and motivate, rather than stress and overwhelm.
6. Prompts within the household should enable privacy when it is not desired, but be readily available when it is.

Concept Framework

Drawing from existing goal-setting tools and recommendations on creating shared goals with one's partner as references, I created a framework to guide my approach to designing the system.

7. Track progress with visual updates
Progress meters track measurable results. Visual updates through content and media can motivate and provide a sense of accomplishment. Continue setting, editing and renewing values and goals.

1. Establish your core values
Identify and rank the core life values and operational values that are important to you and your relationship.

6. Make goals visible and revisit
Display goals and progress in common areas often encountered. Use triggers to revisit goals often and adjust as needed. Gain individual access on mobile devices.

2. Establish a shared set of values
Share these values with each other. Discuss what overlaps and what doesn't, and together, come up with a shared set of values.

5. Track progress of goals
Identify the tasks or actions needed to achieve your goals. Consider leveraging technology to reduce input and track progress.

3. Set goals that reinforce your values
Create a set of goals (individual and collective) that reinforce these shared values in your relationship. *(The couple's trajectory depends on the position of their relationship. As it progresses, the shared time line continues to get built out.)*

4. Visualize and make S.M.A.R.T. goals
Use images to visualize what success might look like. Write and set goals that are specific, measurable, attainable, relevant, and time-bound.

EVALUATIVE RESEARCH
Think Aloud, Usability, Desirability, & A/B Testing

To begin piecing together the final design, I started moving through the framework created by visualizing and conceptualizing information in different ways. Referencing Golden's established Values Arrangement List and S.M.A.R.T goal-setting systems, I was able to leverage a standard set of information I wanted to conceptualize.

Think Aloud Exercises & Usability Tests

In my first iteration of evaluation, I created a set of low-fidelity paper prototypes, wireframes printed in black and white, to test with potential users in a series of think aloud exercises.

These exercises evaluated the thought process by which users would move through the content displayed and drew out critical observations as to how information was prioritized and displayed.

Initial Setup Process

In the initial setup process, an individual user enters basic profile information and then proceeds to evaluate and rank his or her individual core life values—the values associated with long-term goals—and operational values—the values that drive how a person carries out everyday experiences. Once values are established individual, the couple will then compare the results to establish a shared set of values.

Key Findings

- People were slightly overwhelmed by the number of values they had to rank and prioritize—they weren't sure how they would go about ranking them
- Users suggested ranking values for their partners as well in order to provide additional data points and to gauge how these values might change for their partner
- The way the system pulled together a shared set of values was unclear to users

Resolution

- To make the value ranking process less precise, users now arrange the values in a more open-ended spectrum ranging from high to low, rather than in distinct buckets
- The initial setup process now asks each user to rank his or her individual values, as well as how his or her partner might rank the same values
- To clarify the value aggregation process, values are now displayed and ordered based on their average ranking with its individual scores shown next to it

In the initial set up process, both users are provided with lists of life values and operational values to rank according to their individual values and beliefs.

Once both parties have ranked their individual values, the system arranges the list based on the average rank so the couple can establish a shared set of values.

1

Evaluate your life values
Consider the life values that are important and resonate with you.
Prioritize and rank them accordingly.

Next

	HIGH		MEDIUM		LOW
01	**Achievement** attainment of aspirations and goals	08	**Freedom** independence in thought and lifestyle	15	**Pleasure** entertainment, relaxation and fun
02	**Adventure** pursuing excitement and taking risks	09	**Fellowship** having important relationships with friends	16	**Power** authority, control and influence
03	**Aesthetics** appreciation and enjoyment of the arts	10	**Happiness** satsifaction, joy and contentment	17	**Self-worth** high regard for oneself and others
04	**Community** activity in social or citizen groups	11	**Health** soundess of body and love	18	**Social Service** contributing to the welfare of others
05	**Equality** justice and fair treatment for all	12	**Love** intimacy, devotion and warmth	19	**Spirituality** at one with God; religious beliefs
06	**Fame** recognized and known for your contributions	13	**Nature** respect for animals and the environment	20	**Wealth** affluence, ease and propserity
07	**Family** close relations and support of loved ones	14	**Peace** enduring harmony and freedom from violence	21	**Wisdom** insight, knowledge and understanding

☐ = Personal Values   ☐ = Personal/Social Values   ☐ = Social Values

2

Establish a shared set of values
Share your values with each other. Discuss what overlaps and what doesn't,
and together, define and come up with a shared set of values.

Next

Achievement attainment of aspirations and goals	**Achievement** attainment of aspirations and goals	**Achievement** Create your own definition of what this means to your relationship.
Adventure pursuing excitement and taking risks	**Wealth** affluence, ease and propserity	**Family** Create your own definition of what this means to your relationship.
Aesthetics appreciation and enjoyment of the arts	**Happiness** satsifaction, joy and contentment	**Adventure** Create your own definition of what this means to your relationship.
Community activity in social or citizen groups	**Community** activity in social or citizen groups	**Community** Create your own definition of what this means to your relationship.
Equality justice and fair treatment for all	**Equality** justice and fair treatment for all	**Equality** Create your own definition of what this means to your relationship.
Fame recognized and known for your contributions	**Self-worth** high regard for oneself and others	**Drag Value Here** Agree on your shared set of values
Family close relations and support of loved ones	**Family** close relations and support of loved ones	**Drag Value Here** Agree on your shared set of values

Navigating the Dashboard & Profile Pages

Once the couple completes the initial setup process and creates both individual and shared profiles, they can track their activity on the main dashboard page. This page serves as their home page, featuring recent updates and upcoming items. Their profile is defaulted to their shared page where they can view the core values they established as well as their achievements. The individual profile page allows each person to update his or her value ranking and track individual activity.

Key Findings

- Users didn't like the scroll down format of the dashboard—they are accustomed to seeing all the information at one time, rather than having to scroll through a lengthy summary of activity.

- The placement of the activity feed was confusing and unconventional—users expected to see the activity feed on the side of a page, secondary to the information displayed, or on a separate page altogether.

- Language used in some sections were too academic—people had a hard time understanding terms such as "life values" and "operational values"

Resolution

- The information on the dashboard was condensed to show only key summaries of content or upcoming tasks related to their goals
- The activity feed was moved from the dashboard and profile pages to exist on a new page in the system altogether
- The language was edited to display "what we value in life" in place of "life values" and "how we live each day" in place of "operational values"

co.habits

DASHBOARD

PROFILE GOALS FINANCES ACCOUNTS LOG OUT

welcome back, sam & jess!

it's been **6 months** since you've assessed your values and goals together

GO TO PROFILE >

sam & jess

The dashboard provides a summary of everything happening, including the couple's active goals, financial summary, upcoming payments, and activity feed.

The dashboard highlights a couple's active goals, displaying percentage completion and number of tasks to do.

your active goals (4)

save up for a down payment on a house

23% complete

03 tasks to-do

plan a summer trip to italy

45% complete

08 tasks to-do

visit jessica's parents in wisconsin

80% complete

02 tasks to-do

participate and train for the tour de cure

54% complete

08 tasks to-do

back to top

The financial summary gives an overview of the couple's financial contributions and payments.

your financial summary

VIEW FINANCES

total goal contributions (april)

$1429 contributions

02 goal payments

04 recurring

total joint balance

$871 citizens bank

upcoming payments

$72.80 verizon fios......may 15

$67.30 pg&e bill..........may 28

back to top

your activity feed

ADD ACTIVITY

Creating and Managing Goals

The goals page is where couples can create and track shared goals together. It displays a list of all their active goals, a general time line of each goal, and their progress towards completion. Each goal can be expanded to show the image associated with the goal, the major tasks to complete, and activity associated with the goal.

Key Findings

- The granularity of the goals tracked was unclear, as the sample goal sub tasks showed tasks to varying scales
- Measurement of progress was unclear, making the progress meter less meaningful
- People wanted to see progress of goals broken down individually, as well as jointly, especially of there were tasks assigned to both members of the couple—they liked having a little bit of competition as motivation

Resolution

- Users were given more ownership over how their goals were measured and tracked in order to allow them to define the granularity of each goal
- Progress measurements were broken down into user-selected tracking methods: completion of tasks or milestones, amount of money saved, miles traveled, etc.
- An additional progress bars were added an displayed in the goals overview to show joint or individual progress of each goal

our mission statement

Be true to ourselves and each other. Be passionate in our love, our work, and our community. Live fearlessly each day with no regrets.

reference your shared values

YOUR LIFE VALUES >   YOUR OPERATIONAL VALUES >

sam & jess

The goals page provides an overview of the couple's active and accomplished goals.

Users can also create a new goal on this page and view a slideshow of active and accomplished goals to stay inspired.

what we hope to accomplish together

Together, create a set of goals that will reinforce your shared values in your relationship.

CREATE NEW GOAL   VIEW SLIDESHOW

Each goal created is further broken down to enable SMART goal setting.

goal: save up for a down payment on a house

category: finances | **core value:** wealth | **timeline:** 3 years

23%

description/purpose
Et est dolorem late volorum as debis alibus vollupi delist facea vollores et ad exped quis aut laborpor ant vitatur? Ut rehent ipiducit fugit abor ab ium

progress metric
Need $15,000 in savings

▼ **tasks (6)**   ADD TASK

✓ link bank accounts to co.habits   ✎ ✕
   Due: Dec 29, 2012   **Task:** 1/3   **Owner:** Jessica   **Status:** Completed

✓ create a savings plan in co.habits   ✎ ✕
   Due: Dec 29, 2012   **Task:** 2/3   **Owner:** Jessica   **Status:** Completed

✓ set monthly contribution of $500 to savings each month   ✎ ✕
   Due: Nov 20, 2015   **Task:** 3/3   **Owner:** Both   **Status:** In Progress

see more

Goals are divided into tasks, which drive progress and make each goal more achievable.

▼ **activity feed**   ADD ACTIVITY

total contribution of $500 to down payment   >
Date: Apr 20, 2013   **Contributors:** Both   **Recurring:** Monthly

total contribution of $500 to down payment   >
Date: Mar 20, 2013   **Contributors:** Both   **Recurring:** Monthly

something with a picket fence! 📎
Date: Mar 15, 2013   **Contributors:** Jessica   **Recurring:** No

Goals can be expanded or condensed to maximize space.

goal: plan a summer trip to italy   ✎ ✕
category: leisure | **core value:** adventure | **timeline:** 1 year   45%

goal: visit jessica's parents in wisconsin   ✎ ✕

Managing Shared Finances

The finances page allows couples to manage their shared finances by tracking upcoming recurring payments, total contributions made towards specific goals, as well as past payments. At a secondary level, each person can manage their individual contributions and track their own spending.

Key Findings

- It was unclear whose overview and contributions the user was viewing; users initially thought the page was displaying individual contributions rather than shared

- Users were confused with a total goal contributions chart that included monthly recurring payments since they did not consider recurring bills as goals

- The overall priority and ranking of information was overall unclear and random

- People felt the individual goal contribution charts could get overwhelming to scroll through if there were several goals set up

- The difference between goal payments and recurring payments was unclear

Resolution

- An option to toggle between shared and individual views was added
- A high level chart of all financial activity for the month was displayed to give the couple a summary of everything happening
- The information was prioritize to focus on: 1. showing where money was going, 2. tracking goals, 3. viewing all activity
- The ability to minimize goal contribution charts was added for more flexibility
- Language was clarified to avoid confusing between different types of payment

sam & jess

manage your finances together

Talking about money is an important part of any relationship. Be sure to discuss financial matters together and suppor each other through the process.

FIND WAYS TO SAVE   **GET FINANCIAL TIPS**

The finance page helps couples manage their shared expenses without explicitly merging their finances.

The system enables couples to link their accounts and track payments outside the system.

your financial overview

upcoming payments   **PAY BILLS**

verizon fios ✎   **$72.80**
Due: May 15, 2013   Category: Internet   Recurring: Monthly

pg&e ✎   **$67.40**
Due: May 28, 2013   Category: Gas & Electric   Recurring: Monthly

xyz realty ✎   **$675.00**
Due: May 28, 2013   Category: Rent   Recurring: Monthly

american express ✎   **$520.18**
Due: Jun 04, 2013   Category: Credit Card   Recurring: Monthly

see more

An overview of the couple's financial contributions help them keep track of bills and goals.

your financial goal contributions

MANAGE

total goal contributions (april)   ✎ ✕

$500 down payment

$200 wisconsin trip

$54 gas & electric

$871 joint balance

$675 monthly rent

summary

$1429 total contributions

02 goal payments

03 recurring payments

goal: down payment   ✎ ✕
Contributors: Both   Recurring: Monthly   End Date: Nov 20, 2015

17% completion

$2500 contributed

$15,000

goal: tour de cure   ✎ ✕
Contributors: Sam   Recurring: No   End Date: Sep 12, 2013

50% completion

$500 contributed

$1,000

Desirability Tests

In the next phase of evaluative research, users were prompted to interact with and test a skinned, clickable prototype on the screen. Because the think aloud exercises helped to address the design of the core functions in more detail, I left this phase more open-ended and less guided, testing the desirability of the experience overall. This allowed users to explore the site as if they were interacting with it to track their own values, goals, and expenses. In this modified approach to desirability testing, users were prompted with questions to gain feedback on the appearance, ease of use, motivation and overall quality of the experience.

Figure 5.4.2. A couple interacting with the prototype, explaining their reactions in terms of the overall desirability of the interface and concept.

Appearance

The majority of the feedback was around the visual appearance and desirability of the design:

- Users felt the system was too clinical and wanted more focus on showcasing and visualizing shared values and experiences
- While they thought the visualizations were very clean and simple to decipher, the wanted to feel compelled to interact with it over time.
- Users felt more visual narratives of the couple's achievements could reflect the love and personality of the relationship more

Ease of Use

This category took into account how easily users could move through the system:

- The inconsistency in the system's voice through some users off (e.g., "your financial overview" vs. "what we value in life")
- Users wanted to be able to filter or sort goals based on various criteria; they felt this would make it easier to navigate the content in a more personal way

Motivation

This section looked at the users' motivations to participate and interact with the system:

- Users wanted the system to be more playful and light-hearted—they felt the interactions were fairly static and hoped for more personality
- They wanted the process for ranking values to be more open-ended and less rigid; they felt intimidated by having to assign each value a rank

Quality

Some users brought up critical questions regarding the overall transition:

- Is there a pre-assessment phase? Can this system help determine if a couple is ready for this transition before the fact?
- What happens if the couple's values don't match at all? What feedback or recommendations would the couple receive to help them through the transition?

Figure 5.4.3. Research participant pointing to her preference for having progress bars in a linear format (top), walking through the activities page with another research participant (bottom).

A/B Testing & Critical Incident Technique

Feedback received from the desirability tests was helpful in driving the final iteration of the prototype. However, there were several approaches to creating a more visual and playful way for couples to engage with the service. To address the feedback and get a sense of what most users would prefer, I created different layouts of the same screens, as well as tested different forms of interactions in a modified round of A/B Testing, in which I leveraged the critical incident technique to gain a more qualitative perspective from users.

Instead of randomizing the order the screens were shown or randomly select certain users to receive one version of a screen versus another, I presented similar screens one after another comparing similar content in different formats. This process allowed me to gauge a consensus on which visual styles and interactions were most approachable and appropriate for the content displayed.

Establishing Individual and Shared Values

Two different layouts were tested to understand how users would rank and prioritize their values. One layout featured a more structured ranking system, while the other layout allowed users to spread the values around more loosely.

A. Ordering values within high-medium-low buckets

B. Ranking values over a spectrum from high to low

Users preferred *Design A* when re-visiting their values or evaluating their final ranking decisions.

However, to initially rank and sort through the different values, users preferred *Design B*, as it required them to be a little less rigid in how they arranged the cards.

Display of Dashboard Content

To bring more emphasis to the visual narratives within the couple's life, I changed the dashboard into a main activities page, emphasizing all the events in the couple's life. I tested two ways to visualize the content: a timeline design and a pin board design.

A. Displaying activity in a timeline format

B. Displaying activity in a pin board format

Many users disliked the two column timeline in *Design A.* However, they thought the progress bars were helpful in emphasizing what goals needed to be addressed.

Users enjoyed the visual nature of *Design B*, citing it as "inspirational", but found it less functional in tying the images back to a specific goal or action.

final concept & design

welcome to co.habits!

Building a shared future together means supporting each other through your aspirations and achievements. Start planning your journey today!

CREATE A NEW PROFILE >

devon & mary
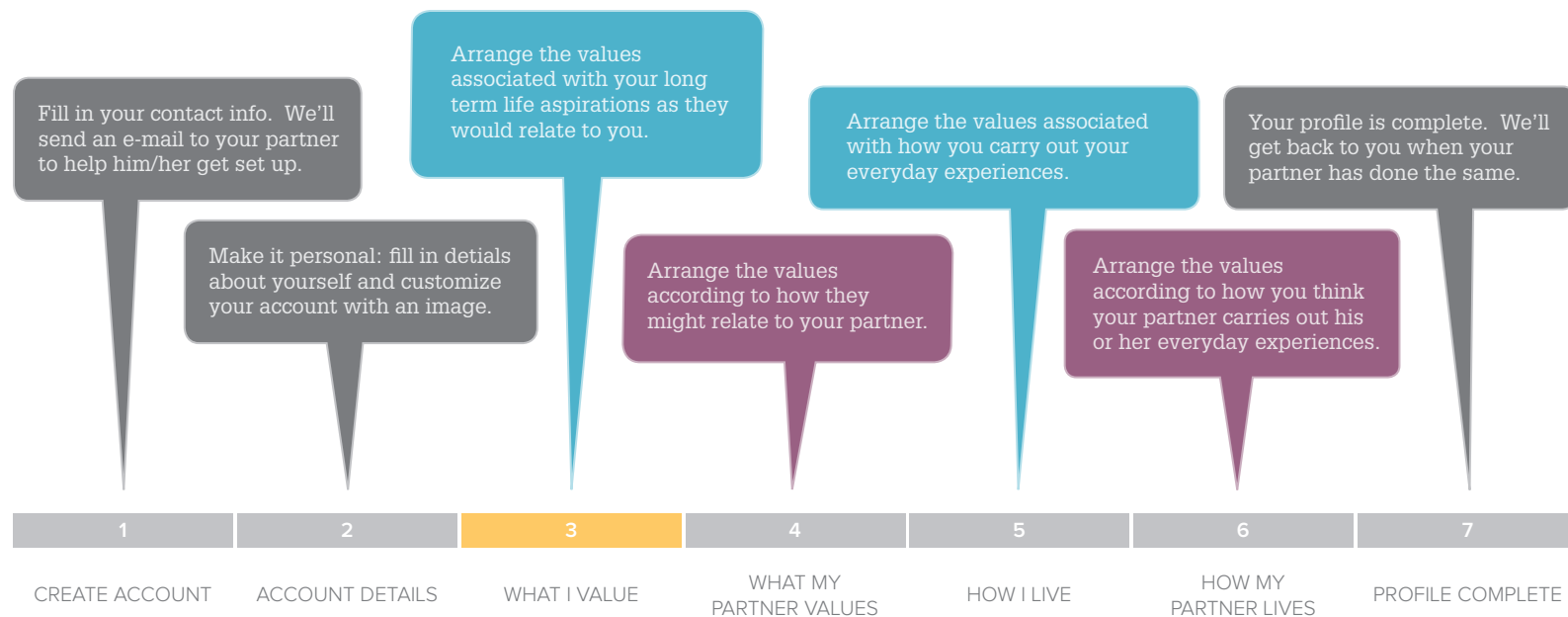♥ co.habiting since 2011

Overview

co.habits is a web platform that helps couples initiate those important conversations early in their relationship to establish a mutual value system. By discussing and establishing a shared set of values and core beliefs, the system helps couples aspire to and achieve major milestones and life goals together.

Through a flexible goal-setting and financial system, couples merge aspects of their lives at a pace that is comfortable for them. While the system celebrates the achievement of shared goals, the inherent flexibility of the system's design helps couples grow together and reassess priorities as aspects of their lives and relationship change. The following pages outline the core features of the service.

Value Assessment

The service is centered around a value assessment system that allows couples to:

- reflect and assess both their **aspirational values** ("what they value in life") and **operational values** ("how they choose to live")
- actively discuss and evaluate their values to communicate expectations and desired outcomes for the relationship, ultimately defining a core set of values to build a shared identity
- continually reassess values and re-adjust as priorities evolve

Fill in your contact info. We'll send an e-mail to your partner to help him/her get set up.

Make it personal: fill in detials about yourself and customize your account with an image.

Arrange the values associated with your long term life aspirations as they would relate to you.

Arrange the values according to how they might relate to your partner.

Arrange the values associated with how you carry out your everyday experiences.

Arrange the values according to how you think your partner carries out his or her everyday experiences.

Your profile is complete. We'll get back to you when your partner has done the same.

1	2	3	4	5	6	7
CREATE ACCOUNT	ACCOUNT DETAILS	WHAT I VALUE	WHAT MY PARTNER VALUES	HOW I LIVE	HOW MY PARTNER LIVES	PROFILE COMPLETE

what I value in life

Your life values are the values you associate with your long term life aspirations. Prioritize and rank the following values according to how they relate to you.

● PERSONAL   ● PERSONAL/SOCIAL   ● SOCIAL

1

achievement
attainment of aspirations and goals

pleasure
entertainment, relaxation and fun

freedom
independence in thought and

fellowship
having important relationships with friends

adventure
pursuing excitement and taking risks

power
authority, control and influence

happiness
satisfaction, joy and contentment

self-worth
high regard for oneself and others

aesthetics
appreciation and enjoyment of the arts

community
activity in social or citizen groups

health
soundess of body and love

social service
contributing to the welfare of others

equality
justice and fair treatment for all

love
intimacy, devotion and warmth

spirituality
at one with God; religious beliefs

nature
respect for animals and the environment

wealth
affluence, ease and propserity

fame
recognized and known for your contributions

peace
enduring harmony an

wisdom
insight, knowledge and understanding

family
close relations and support of loved ones

2   HIGH ◄─────────────────────────► LOW

< BACK   NEXT >

---

establish the values you hope to live by

Share your assessments of the values you hope to carry out in your everyday experiences. Discuss what overlaps and what does not. Together, define and establish a shared set of operational values as a couple.

OVERALL RANKING OF OPERATIONAL VALUES

		SAM		JESSICA		
01 OVERALL	**accountability** being responsible, credible and trustworthy	02 SELF	01 PARTNER	01 SELF	03 PARTNER	+
02 OVERALL	**courage** being brave, intrepid and fearless	03 SELF	02 PARTNER	03 SELF	02 JESSICA	+
03 OVERALL	**honesty** being moral, ethical and truthful	01 SELF	04 PARTNER	07 SELF	01 PARTNER	+
04 OVERALL	**humor** being light-hearted, witty and funny	06 SELF	03 PARTNER	05 SELF	07 PARTNER	+
05 OVERALL	**service** being supportive, aiding and assisting	04 SELF	08 PARTNER	04 SELF	05 PARTNER	+
06 OVERALL	**forgiveness** being able to excuse and let go	05 SELF	07 PARTNER	09 SELF	06 PARTNER	+
07 OVERALL	**affection** beign passionate, loving and caring	07 SELF	05 PARTNER	02 SELF	11 PARTNER	+

HOW WE HOPE TO LIVE

accountability ✎ ✕
being responsible, credible and trustworthy

courage ✎ ✕
being brave, intrepid, and fearless

honesty ✎ ✕
being moral, ethical and truthful

forgiveness ✎ ✕
being able to excuse and let go

+ ADD VALUE HERE

+ ADD VALUE HERE

+ ADD VALUE HERE

< BACK   NEXT >

1

Value cards can be scattered and arranged to help users think through the process.

2

Values are arranged along a spectrum from high to low, leaving it open ended for the user. Once submitted, co.habits ranks and organizes the value cards.

3

The ranking from both individuals are aggregated and averaged to help you set shared values together. Couples can use this to initiate discussion, making edits and creating their own value definitions as they see fit.

A Shared Identity

The service drives couples to co-created a shared identity through a joint profile page that:

- outlines the aspirational and operational values the couple has established and defined as core to their relationship
- tracks the couple's past achievements, active goals, and future aspirations through an inspiration wall of images
- enables each individual to access his or her personal profile to manage individual value ranking and activity
- allows couples to constantly edit and re-asses as their relationship and values grow together

Figure 6.1.1. On the individual profile pages, users can revisit their personal rankings of their aspirational and operational values, as well as view and manage personal contributions to the system.

co.habits

ACTIVITY **PROFILE** GOALS FINANCES ACCOUNTS LOG OUT

our mission statement

Be true to ourselves and each other. Be passionate in our love, our work, and our community. Live fearlessly each day with no regrets.

1

SAM RICHARDS >   JESSICA DAILEY >

sam & jess
co.habiting since 2012

2 our shared profile

what we value in life	>
how we live each day	>
what we aspire to do	>
what we hope to achieve	>
what we have achieved	>

what we value in life
These are the values we associate with our long term life aspirations.

EDIT

wealth
be accountable and responsible in our spending

achievement
driven to succeed in our careers

family
be supportive in serving loved ones

equality
be fair and caring to those around us

community
make it a priority to serve the community

love
continually renew and express our devotion to each other

adventure
stay flexible and open to enable spontaneity

how we live each day
These are the values we hope to carry out in our everyday experiences.

EDIT

3 ## what we aspire to do
These keep us inspired for the future goals we hope to share.

EDIT

"LOVE THIS KITCHEN"
Date: Mar 23, 2013

"ONE DAY..."
Date: Mar 15, 2013

"FOR OUR FUTURE CORGI"
Date: Apr 20, 2013

1

From the couple's shared profile page, each person can still access their individual profile pages to see specific value ranking and activity.

2

The profile's navigation pane allows the user to customize what's visible or not visible at any given time.

3

The couple can also use the wall to collect and share images to inspire future goals.

Goal Setting & Tracking

The service celebrates achievements through a goal setting system that empowers couples to:

- co-create shared goals based on established values with the ability to further subdivide goals individually
- measure and track progress through a range of metrics (e.g., amount of money accumulated, hours spent on activity, completion of tasks or milestones, etc.)
- set images to help the couple focus on and envision a shared future and be visually inspired towards achievement

Figure 6.1.2. Users can use co.habits to create a new goal or re-initiate a previously saved goal. The template allows users to upload or pull in an image from content sites like Google or Pinterest and ensures the goals created are S.M.A.R.T.

co.habits

ACTIVITY   PROFILE   **GOALS**   FINANCES   ACCOUNTS   LOG OUT

our mission statement

Be true to ourselves and each other. Be passionate in our love, work,
and our community. Live fearlessly each day with no regrets.

WHAT WE VALUE IN LIFE   HOW WE CHOOSE TO LIVE   **1**

our active goals (6)

CREATE A GOAL   VIEW ACHIEVEMENTS   **2**

SORT BY   PROGRESS

recent activity

PARTICIPATE AND TRAIN FOR THE TOUR DE CURE
Value: Community   Duration: 10 months   Metric: Miles

60%

UPCOMING: RIDE 30 MILES FOR TRAINING
Due: Apr 21, 2013   Contributor: Sam

PLAN A SUMMER TRIP TO ITALY
Value: Adventure   Duration: 1 year   Metric: Tasks

20%
40%

UPCOMING: BOOK HOTEL FOR FLORENCE
Due: Apr 29, 2013   Contributor: Sam

SAVE UP FOR A DOWN PAYMENT
Value: Wealth   Duration: 3 years   Metric: Money
3

30%

UPCOMING: MOVE $500 TO DOWN PAYMENT
Due: Apr 20, 2013   Contributor: Both

HELP JESS GET AN INTERACTION DESIGN JOB
Value: Achievement   Duration: 1 year   Metric: Milestones

20%

UPCOMING: FINISH PORTFOLIO
Due: May 31, 2013   Contributor: Jessica

VISIT SAM'S PARENTS IN CLEVELAND
Value: Family   Duration: 6 months   Metric: Tasks

ADOPT A CORGI!
Value: Happiness   Duration: 8 months   Metric: Tasks

$500 MOVED TO DOWN PAYMENT
Due: Apr 20, 2013

FOR OUR FUTURE CORGI
Due: Apr 15, 2013

RIDE 20 MILES FOR TRAINING
Due: Apr 14, 2013

BOOKED TICKETS TO SEE DAVID
Due: Apr 14, 2013

RIDE 20 MILES FOR TRAINING
Due: Apr 07, 2013

FINISHED DINING ROOM PAINTING
Due: Apr 02, 2013

RIDE 20 MILES FOR TRAINING
Due: Mar 31, 2013

STEAK! RECOMMENDED BY PAUL
Due: Mar 22, 2013

$500 MOVED TO DOWN PAYMENT
Due: Mar 20, 2013

see more

1

The couple's shared values
can be accessed directly
from the goals page to help
couples create goals that
strengthen those values.

2

A slide show of the couple's
achievements and goals
helps keep them inspired
and motivated.

3

A series of icons enables
users to view goal details,
edit, view the activity
timeline, view the gallery of
images associated with the
goal, save and revisit a goal
later, and expand the view.

73

Wealth Management

The service accommodates to the unique financial needs of a cohabiting couple through a finance planning tool that allows couples to:

- track financial goals and spending without immediately merging individual finances
- focus on achieving shared goals and set individually specified goal contributions
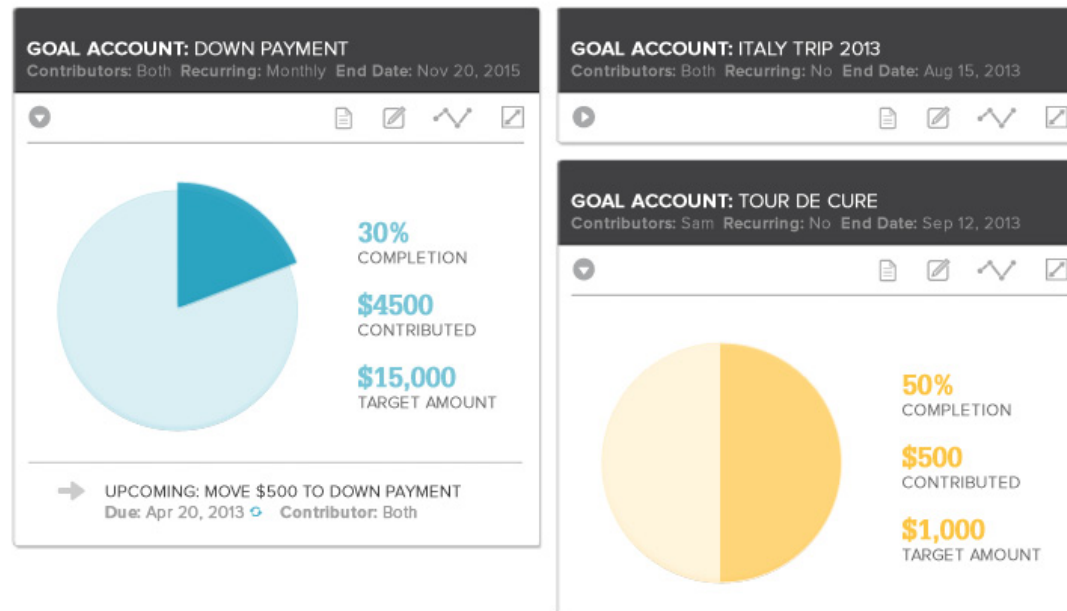- manage spending efficiently by linking accounts to recurring goal payments and tracking day-to-day spending

Figure 6.1.3. A goal account can be created for each financial goal. This allows couples to track specific spending in smaller widgets and separate out financial contributions.

ACTIVITY   PROFILE   GOALS   **FINANCES**   ACCOUNTS   LOG OUT
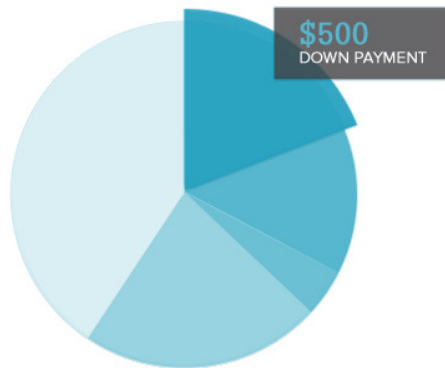
manage your finances together

Talking about money is an important part of any relationship. Be sure to discuss financial matters together and support each other through the process.

FIND WAYS TO SAVE   GET FINANCIAL TIPS

(1)

where our money is going   **(2)** MANAGE

total contributions (april)

$500
DOWN PAYMENT

$1429
TOTAL CONTRIBUTIONS

$871
REMAINING BALANCE

02/04
GOAL PAYMENTS

(3) what we're contributing to our goals   SORT BY   AMOUNT

GOAL ACCOUNT: DOWN PAYMENT
Contributors: Both Recurring: Monthly End Date: Nov 20, 2015

30%
COMPLETION

$4500
CONTRIBUTED

$15,000
TARGET AMOUNT

UPCOMING: MOVE $500 TO DOWN PAYMENT
Due: Apr 20, 2013   Contributor: Both

GOAL ACCOUNT: ITALY TRIP 2013
Contributors: Both Recurring: No End Date: Aug 15, 2013

GOAL ACCOUNT: TOUR DE CURE
Contributors: Sam Recurring: No End Date: Sep 12, 2013

50%
COMPLETION

$500
CONTRIBUTED

$1,000
TARGET AMOUNT

upcoming payments

VERIZON FIOS $72.80
Due: May 15, 2013   Category: Internet

PACIFIC GAS & ELECTRIC $67.30
Due: May 28, 2013   Category: Gas & Electric

XYZ REALTY $675.00
Due: May 28, 2013   Category: Gas & Electric

AMERICAN EXPRESS $720.18
Due: Jun 04, 2013   Category: Credit Card

see more

recent payments

DOWN PAYMENT $500.00
Date: Apr 20, 2013   Category: Goal

XYZ REALTY $675.00
Due: Mar 28, 2013   Category: Rent

PACIFIC GAS & ELECTRIC $54.00
Due: Mar 28, 2013   Category: Gas & Electric

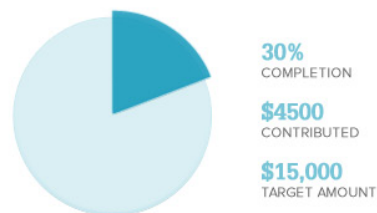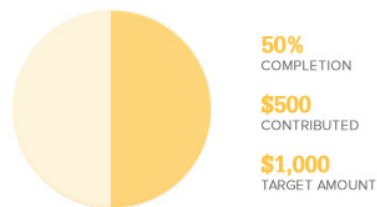PLANE TICKETS CLEVELAND $200.00
Due: May 27, 2013   Category: Goal

see more

1

To help couples approach the topic of finances, co.habits provides them with tips and advice to help them get started.

2

At a secondary level, couples can manage the details of their finances, such as how much each person is contributing to various goals and bills.

3

Each financial goal gets a separate goal account and widget to allow couples to drill down on detailed spending habits if desired.

Visual Inspiration & Activity

The service drives and inspires activity within the relationship by allowing couples to:
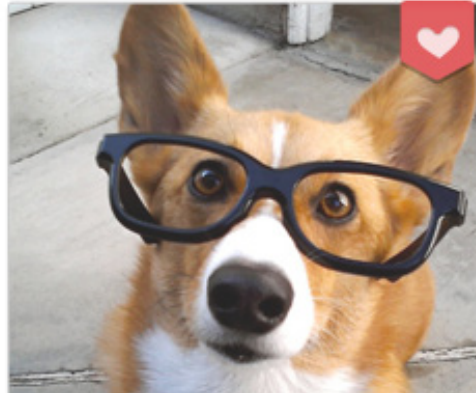
- visually track each other's activity through a main activity page that aggregates content within the entire system
- easily upload or add images from all connected devices
- quickly monitor recurring payments and activities or items directed at progressing goals or driving future goals

Financial Activity

Financial activity posts track bill payments and goal contributions. Recurring activity will be automatically posted with the goal's cover image.

Inspirational Activity

Inspirational activity is encouraged and driven by the couple to help keep aspirations top of mind, even if it is not currently an active goal.

Goal-Driven Activity

Goal-driven activity directly drives progress of one of the couple's active goals. Couples are encouraged to share progress visually to stay motivated and inspired.

ACTIVITY   PROFILE   GOALS   FINANCES   ACCOUNTS   LOG OUT

welcome back, sam & jess!

It's been **6 months** since you've assessed your values and goals together. Visit your profile to see what's changed!

VIEW PROFILE   1

sam & jess
♥ co.habiting since 2012

recent activity   3   VIEW GOALS

2   upcoming tasks   >

BOOK TRAVEL FOR CLEVELAND
Due: Apr 20, 2013   Contributors: Jessica

RIDE 20 MILES TO TRAIN FOR THE RACE
Due: Apr 21, 2013   Contributors: Sam

CONTRIBUTE $500 TO DOWN PAYMENT
Due: May 20, 2013   Contributors: Both

see more

upcoming payments   >

VERIZON FIOS $72.80
Due: May 15, 2013   Category: Internet

PACIFIC GAS & ELECTRIC $67.30
Due: May 28, 2013   Category: Gas & Electric

XYZ REALTY $675.00
Due: May 28, 2013   Category: Rent

see more

30%

$500 MOVED TO DOWN PAYMENT
Date: Apr 20, 2013

"FOR OUR FUTURE CORGI"
Date: Apr 20, 2013

60%

RODE 30 MILES FOR TRAINING
Date: Apr 14, 2013

40%

"GOT TICKETS TO SEE DAVID"
Date: Apr 14, 2013

20%

"MADE A FLORENCE FOOD LIST!"
Date: Apr 10, 2013

"NEED TO PLAN ANOTHER SHOW"
Date: Apr 02, 2013

45%

20%

$500 MOVED TO DOWN PAYMENT
Date: Mar 20, 2013

1

co.habits reminds couples every 6 months to revisit and re-assess their values and goals in case things have changed.

2

Upcoming activity on the left panel helps couples keep track of items they may need to address.
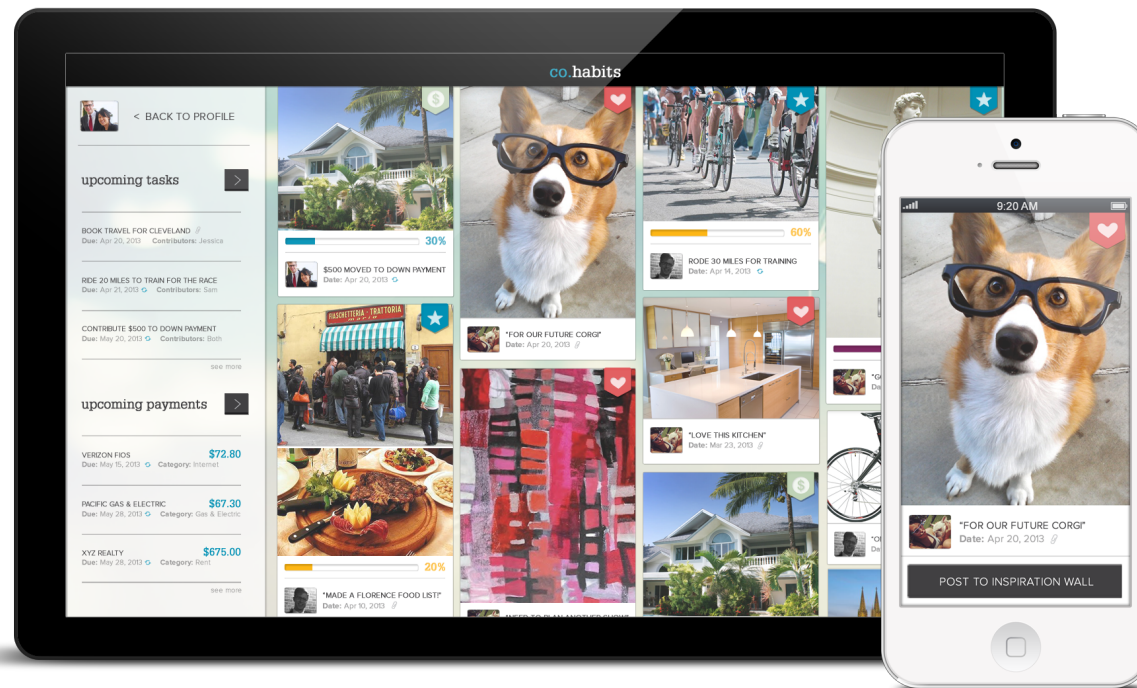
3

A visual activity feed helps couples keep track of each other's activity while staying inspired and motivated.

Technology Integration

The service keeps goals front of mind and effectively tracks and manages progress by leveraging:

- smart mobile devices to track individual goals on-the-go, as well as drill down and get reminders on tasks or actions
- embedded technology within the household to ensure couples don't lose sight of their larger aspirations
- personal tracking devices to easily track goals and reduce tedious data input from the user

Relationship Assessment

The service recognizes that this cohabitation is not always a seamless transition. For those seeking additional advice, an assessment section helps couples evaluate the trajectory of their relationship.

how do we know if we are ready to co.habit?

Moving in together can be a big step in your relationship. Here are some important questions to ask yourself before you make this decision together.

- How do I feel with this person in general?
- Is s/he responsive to me? Does s/he accept influence from me?
- Is s/he there when I reach out and need him/her?
- Does s/he hear me when I'm scared, hurt or sad, and can s/he relieve my distress?
- Do I feel valued and that what I have to say matters?
- Do I feel emotionally safe to talk about anything? To say what I really feel or wish for, even if my partner may disagree?
- Do we learn from each other and grow as a couple?

what if our values don't match?

While this does not necessarily mean that you are incompatible or should not be together, this could potentially be a sign that you are on diverging paths in life. Use this as a point of discussion and an opportunity to work through these conflicts together.

- Spend more time together and focus on building your relationship with each other
- Sort through your differing views; this involves having a dialog in which each person feels safe enough to express his or thoughts and feelings
- If you take your relationship seriously, then recognize that you'll need to work at this
- Try to understand why your values may conflict and revisit them often to see if you are growing in this relationship together

Figure 6.1.4. Relationship assessments are pulled from work published by accredited psychologists to help couples sort through questions and make sense of the information they are gaining from the system.

Scenarios

To understand how a couple might use and incorporate co.habits into their life, the following scenarios show Sam and Jessica's experience co.habits throughout various stages of their relationship.
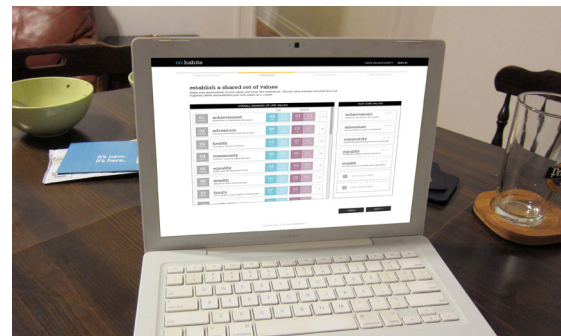
Setup & Value Assessment

After dating for almost a year, Jessica and Sam decide to take the next step in their relationship and move in together.

Jessica talks through the decision with her friend Amy. Amy tells Jessica about co.habits, a tool she and her fiance Adam have used to ease their experience cohabiting.

Later that night, Jessica and Sam take a look at co.habits together. They decide to try it out and start by setting up their individual profiles and assessing their values.

They start discussing the values they share, identifying and defining what is important in their relationship. Together, they create their first goal of finding an apartment together!
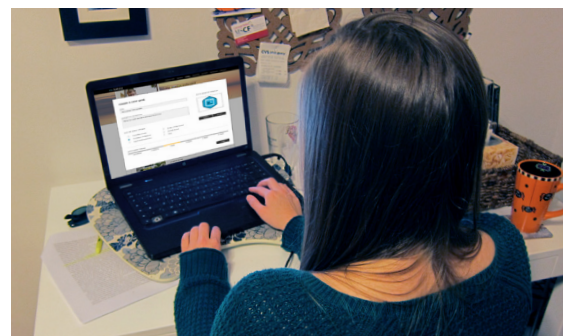
Goal Setting & Tracking

After settling into their new apartment, Jessica and Sam use co.habits to reflect on what they have accomplished in the past few months.

They discuss their aspirations for the year. Jessica has been thinking of switching into a career in web design. Sam suggests she add that to co.habits as a goal.
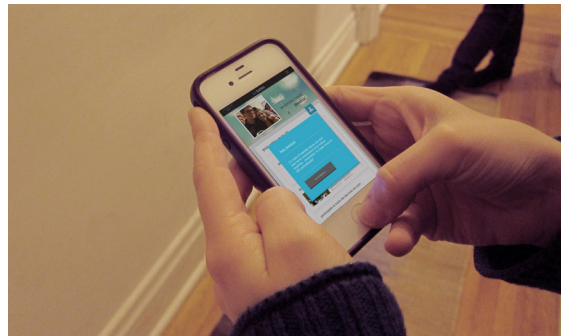

Jessica creates a new goal, "get a web designer job". She includes key milestones like "create a portfolio" and "update resume" and sets her goal timeline to one year.

Over the course of the year, co.habits helps Jessica stay on top of her career goals. With Sam on the system also, he can continue to support Jessica through the process.

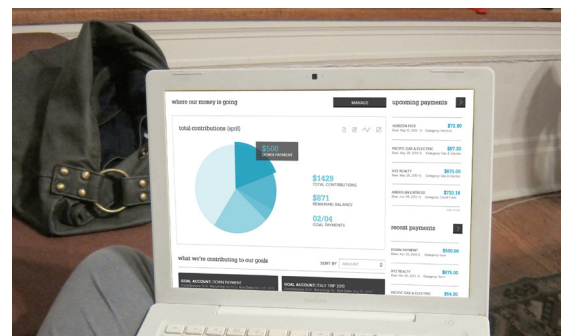
PART THREE

Merging & Sharing Finances

After one year of living together, Jessica and Sam are prompted by co.habits' semiannual reminder to reassess their goals and values.

As they begin to discuss their values, talk of finances arises. They don't currently merge their finances, but they agree that establishing financial security is important as a couple.

They decide to open a joint bank account to simplify their expenses and better manage their finances. With co.habits, they can begin to set long term financial goals together.

After opening a joint bank account, they link it to co.habits. By contributing a set amount to their joint bank account each month, they can confidently manage their finances.

conclusion

Reflection & Evaluation

When I initially began my thesis, I set out to explore how people managed their identity--how it developed over time through different experiences and how it shifted and changed as people moved through different life transitions. In the process of narrowing my topic further, I was drawn to the home as an environment to study, as it was the site of the most intimate facet of one's identity. From there, cohabitation among unmarried couples quickly emerged as a topic of interest, as it created a unique dynamic where two individuals negotiated their own independence to develop and create a shared identity with someone he or she loved.

Through my design approach, I explored the various stages of cohabitation, including the events and decisions that often precede that stage in a relationship and the resulting outcomes of that transition. The final design solution took these unique situations and outcomes to serve as a constant moderator throughout the process. With co.habits, I wanted to create a service that supported couples into and through cohabitation, ultimately setting a couple up to successfully build a shared identity together and adapt to changing values and goals over time. Many of the couples I interviewed showed me how easy it was to get caught up in the issues of their day-to-day and lose sight of the bigger picture. Through co.habits, couples can capture and reflect on their experiences, while continually assessing and building a shared future together.

The user interactions and research phases were extremely insightful in bringing to light the unique needs of those in the context of a loving, cohabiting relationship. Unlike other identities a person may take on, the identity assumed within this role prioritizes personal meaning over productivity and efficiency. People loved that the system could help them manage finances and goals, but what they really wanted was a place where they could create and grow their relationship, to create meaning and values for something born out of love. They wanted a service that captured the playfulness and personality of the relationship, which I believe really began to show through after rounds of iterations.

Ultimately, co.habits not only fills a large gap among existing solutions, but it also provides a robust system that triggers and motivates couples to think about the larger relational implications of cohabitation. While co.habits meets the more concrete needs of helping couples achieve goals and manage finances, it is the more abstract need of assessing their values over time that truly drives a couple into developing a set of core values to co-construct a shared identity. While many of these topics are filled with challenging conversations around finances and long-term expectations, co.habits leaves this process open-ended and flexible, helping couples achieve these major milestones in their lives at a pace that suits them.

While I do have a comprehensive vision of how this service would fit into the lives of an unmarried, cohabiting couple and before, during, and after cohabitation, there are a few issues that still remain unresolved. One of the components of the system mentioned, but not fully explored was how embedded technology would fit in with the overall system and within the household. This was an idea I was interested in bringing into the concept, but chose to de-prioritize as it would exist more peripherally to main web system. I also did not get a chance to test and evaluate the prototype over an extended period of time in order to assess how this would realistically fit into a couple's habits and routines. Although scenarios were leveraged to imagine possible futures, it is challenging to fully anticipate the needs that would arise for a couple over time.

Lastly, an area that was often discussed but not addressed in the final design was how to transition couples out of the system or out of a cohabiting relationship once they chose to end their union. This was a critical area that was considered, but within the context of the project, it would have been a challenging component to test and prototype. I also chose not to prioritize this component, as I wanted to ensure I focused on helping a couple co-create a shared identity. However, if this was considered or extended in a future study, this aspect of co.habits could be tested in longer term longitudinal studies or through interview sessions with couples after the dissolution of their cohabiting relationship.

Overall, I believe this project opens the door for other designers to explore cohabitation as a context for design. Through my research process, I uncovered a vast array of unique design opportunities and implications that make this topic a contextually rich area to explore. Cohabitation is still a fairly recent trend within today's society. Many people are shifting their attitudes about moving in with their partner before they make their union official, potentially creating great ripples in how society moves through major life stages and how society views marriage as an institution.

Additionally, my thesis really opened my eyes to designing for a very special set of users. As designers, it is easy to get caught up in creating different features and focusing on the details of an interface, but the design process throughout the year taught me several important lessons about designing for couples.

Design Recommendations

- **Show the Love -** While they do have very practical needs that should be met, they want the products and services they share to reflect the personality, intimacy, and love of their relationship.

- **Let it Grow Naturally -** The way their relationship grows is very organic, and the services a couple uses should be open-ended enough to customize and personalize, as well as remain adaptable to foster this flexibility.

- **Make it Playful -** The unique dynamic within a romantic relationship needs to be captured in the interactions. Couples want to be motivated to use a product that is playful and meaningful, not one that is input heavy and robotic.

- **Focus on Experiences -** The experiences a couple share are really the driving forces of their relationship. Play to those experiences and create ways for couples to reflect on and celebrate those moments and achievements.

Summary

My thesis looks at how young adults merge and negotiate a shared identity by moving into and out of an unmarried cohabiting situation. Through a combination of exploratory interviews and in-home observations coupled with current research and trends in cohabitation, I drew out the key implications and opportunity areas in which design could intervene and help couples cohabiting merge and negotiate the various aspects of their lives.

The final concept delivered, co.habits, delivers a comprehensive service centered around a set of core values that a couple works together to establish. By reflecting and reassessing these values throughout their relationship, co.habits enables couples to set and manage shared goals that reinforce their core values. A financial management tool and integration with a network of devices allow the couple to easily track their goals, focusing on shared experiences and achievements rather than heavy user input.

Overall, while the system helps keep goals front of mind, it more importantly, fosters communication within the cohabiting relationship, as it grows with the couple through the transition. co.habits is designed to be flexible and organic, focusing on helping its users develop a shared identity together and reassess their values as things change and evolve. Although achievements should be celebrated, co.habits helps couples prioritize what's important in their life, rather than completing every single goal. As societal views on cohabitation and marriage continue to change and evolve, couples can no longer rely on outdated models of marriage. With co.habits, they can start from a clean slate and build a shared future together.

Future Outlook

As a standalone service, co.habits relies heavily on its users and their referrals to gain traction and bring couples to the site. However, critical partnerships with existing services, could extend this project further both in how it serves its users and how it is funded. Couples therapy and counseling centers can leverage co.habits as a robust counseling tool to help their clients and patients manage and assess their relationship on a day-to-day basis. Financial institutions can also benefit from using co.habits to cater towards the unique relational needs of couples, especially those considering opening a joint bank account together and potentially planning major purchases together.

Another direction I would be interested in pursuing is to address the more specific demographic needs inherent in the widening marriage gap present in today's society. The marriage gap has shown that those with less education and lower incomes are not only less likely to be married than those with college educations and good incomes, but also that they lack the flexibility and conflict resolution skills that help them succeed in a relationship. By providing more resources and access to skills needed for relationship success, co.habits can take a more active role in bridging both the marriage gap and the socioeconomic gap that currently exists.

references

Identity & Role Transition References

Allen, V. L., & van de Vliert, E. (Eds.). (1984). Role Transitions: Explorations and Explanations . New York, NY: Plenum Press.

Belk, R. (1988). Possessions and the Extended Self. Journal of Consumer Research, 15 (September), 139-68.

Belk, R. (2010). Sharing. Journal of Consumer Research , 36, 175-734.

Coffer, C.N. & Appley, M.H. (1964). Motivation: Theory and research. New York: John Wiley and Sons.

DiMicco, J., Millen, D. (2007). Identity management: Multiple presentations of self in Facebook. In GROUP '07 , ACM (2007).

Dohrenwend, B.S., & Dohrenwend, B.P. Stressful life events: Their nature and effects. New York: Wiley, 1974.

Farnham, S., Churchill, E. (2011). Faceted identity, faceted lives: Social and technical issues with being yourself online. In CSCW 2011 , ACM (2011).

Goffman, E. (1959). The presentation of self in everyday life . New York: Anchor Books.

Kalter, N. (1987). Long-term effects of divorce on children: A developmental vulnerability model. American Journal of Orthopsychiatry, 57, 4, 587-600.

Kirk, D., Sellen, A. (2010). On human remains: Values and practice in the home of archiving of cherished objects. ACM Transactions on Computer-Human Interaction , 17, Article 10 (July 2010), 43 pages.

Leung, M., Tomitsch, M., Moere, A. (2011). Designing a personal visualization projection of online social identity. In CHI 2011 , 1843-1848.

Levinson, D.J. Role, personality, and social structure in the organizational setting. Journal of Abnormal and Social Psychology, 1959, 58, 170-180.

Mamykina, L., Miller, A., Mynatt, E., Greenblatt, D. (2010). Constructing identities through storytelling in diabetes management. In Proc. of CHI 2010 , ACM (2010), 1203-1212.

Mankoff, J., Kuksenok, K., Rode, J.A., Kiesler, S., Waldman, K. (2011). Competing online viewpoints and models of chronic illness. In Proc. of CHI '11 , 589-598.

Massimi, M., Baecker, R. (2011). Dealing with death in design: Developing systems for the bereaved. In Proc. of CHI '11 , 1001-1010.

Massimi, M., Odom, W., Kirk, D., Banks, R. (2010). HCI at the end of life: Understanding death, dying, and the digital. In Proc. of CHI '10 , 4477-4480.

Odom, W., Harper, R., Sellen, A., Kirk, D., and Banks, R. (2010). Passing on & putting to rest: Understanding bereavement in the context of interactive technologies. In Proc. of CHI '10 , ACM (2010), 1831-1840.

Odom, W., Zimmerman, J., Forlizzi, J. (2010). Virtual possessions. In Proc. of DIS '10 , 368-371.

Odom, W. Zimmerman, J., Forlizzi, J. (2010). Designing for dynamic family structures: Divorced families and interactive systems. In Proc. of DIS '10 , 151-160.

Odom, W., Zimmerman, J., Forlizzi, J. (2011). Teenagers and their virtual possessions: Design opportunities and issues. In Proc. of CHI '11 , 1491-1500.

Sarbin, T.R., & Scheibe, K.E. The transvaluation of social identity. In G. Lindsey & E. Aronson (Eds.), Handbook of social psychology (Vol. 1). Reading, Massachusetts: Addison-Wesley, 1968, 488-567.

Yarosh, S. (2008). Supporting long-distance parent child interaction in divorced families. In Proc. of CHI '08 , 3795-3800.

Zimmerman, J. (2009). Designing for the self: Making products that help people become the person they want to be. In Proc. of CHI '09 , 395-40.-23

Trends and Statistics in Cohabitation

Cohn, D. (April 8, 2011). Family Meals, Cohabitation & Divorce. Pew Social Trends. Retrieved from http://www.pewsocialtrends.org/2011/04/08/family-meals-cohabitation-and-divorce/.

Cohn, D. (November 18, 2010). Marriage and Family: Data and Attitudes. Pew Social Trends. Retrieved from http://www.pewsocialtrends.org/2010/11/18/marriage-and-family-data-and-attitudes/.

Jay, M. (April 14, 2012). The Downside of Cohabiting Before Marriage. The New York Times. Retrieved from http://www.nytimes.com/2012/04/15/opinion/sunday/the-downside-of-cohabiting-before-marriage.html.

Luscombe, B. (November 18, 2010). Who Needs Marriage? A Changing Institution. TIME Magazine. Retrieved from http://www.time.com/time/magazine/article/0,9171,2032116-1,00.html.

Matthew, D., Bramlett, M.D., & Mosher, W.D. (July 2002). Cohabitation, Marriage, Divorce, and Remarriage in the United States. National Center for Health Statistics, 23(22). Retrieved from http://www.cdc.gov/nchs/data/series/sr_23/sr23_022.pdf.

Pew Research Center. (November 18, 2010). The Decline of Marriage And Rise of New Families. Pew Social Trends. Retrieved from http://www.pewsocialtrends.org/2010/11/18/the-decline-of-marriage-and-rise-of-new-families/1/.

Understanding Cohabitation

Bumpass, L. & Lu, H. (March 2000). Trends in Cohabitation and Implications for Children's Family Contexts in the United States. Population Studies, 54(1), 29-41. Retrieved from http://www.jstor.org/stable/2584631?seq=2.

Gold, J.M. (June 27, 2012). Typologies of Cohabitation: Implications for Clinical Practice and Research. The Family Journal: Counseling and Therapy for Couples and Families. Retrieved from http://tfj.sagepub.com/content/20/3/315.abstract.

Hohmann-Marriott, B.E. (November 2006). Shared Beliefs and the Union Stability of Married and Cohabiting Couples. Journal of Family and Marriage, 68(4). Retrieved from http://www.jstor.org/stable/4122890.

Smock, P.J. (August 2000). Cohabitation in the United States: An Appraisal of Research Themes, Findings, and Implications. Annual Review of Sociology, 26, 1-20. Retrieved from http://www.annualreviews.org/doi/abs/10.1146/annurev.soc.26.1.1.

Ross, C. E., & Mirowski, J. (1984). The social construction of reality in marriage: An empirical investigation. Sociological Perspectives, 27, 281-300.

Wamboldt, F.S., & Reiss, D. (1989). Defining a family heritage and a new relationship identity: Two central tasks in the making of a marriage. Family Process, 28, 317-335.

Existing Design Solutions

Couples Counseling Type Solutions

Nance, K. (2013). Solutions for Couples. Retrieved from http://www.kreggnance.com/solutions-for-couples.

Solley, R. (2011, February 7). The Cohabitation Question. Solutions4Couples.com. Retrieved from http://www.solutions4couples.com/the-cohabitation-question/.

Shared Living Solutions

Smith, A., Romero, M., Pousman, Z., Mateas, M. (2008). Tableau Machine: A Creative Alien Presence. Retrieved from http://www.cc.gatech.edu/~mromero/smith_romero_pousman_mateas_2008.pdf.

Clark, D. (2011, August 29). Minimal Ring Alarm Clock. Mmminimal. Retrieved from http://mmminimal.com/minimal-ring-alarm-clock-designed-for-couples/.

Legal Implications

Probert, R. (2009). Cohabitation: Current Legal Solutions. Oxford Journals, 62(1), 316-345. doi: 10.1093/clp/62.1.316.

Warner, J. (2013). Cohabitation Agreement: Contributions and Taxes. Life Management. Retrieved from http://www.lifemanagement.com/fsa14.1.1795/.

Designing for Couples

Bilotta, J. (May 1, 2013). Tips for Designing Mobile Experiences for Couples. Fast Company Co. Design. Retrieved from: http://www.fastcodesign.com/1672391/5-tips-for-designing-mobile-experiences-for-couples.

Concept References

Financial Solutions

Cheng, K. (April 24, 2013). Redesign A Joint Bank Account, Save A Marriage. Fast Company Co.Design. Retrieved from http://www.fastcodesign.com/1672383/redesign-a-joint-bank-account-save-a-marriage.

Personal & Shared Goal Setting

Coopersmith, T. (2010, August 18). 9 Steps to setting goal with your partner. [Web log comment]. Retrieved from http://www.sheknows.com/love-and-sex/articles/816212/future-forecast-setting-goals-with-your-partner.

Goldsmith, B. (2010, October 5). Goals Are a Relationship Necessity - Here Are 10 Tools to Help. Retrieved from http://www.psychologytoday.com/blog/emotional-fitness/201010/goals-are-relationship-necessity-here-are-10-tools-help.

Gollwitzer, P. M. (July 1999). Implementation Intentions: Strong Effects of Simple Plans. American Psychologist, 54, 493-503. Retrieved from http://www.psych.nyu.edu/gollwitzer/99Goll_ImpInt.pdf.

Hamm, T. (2010, July 11). Setting Goals with Your Partner. [Web log comment]. Retrieved from http://www.thesimpledollar.com/2010/07/11/setting-goals-with-your-partner/

Kovac, J.C. (Nov. 2005). SMART Goal Setting. Workspan, 48(11), 63. Retrieved from http://search.proquest.com/docview/194716034.

Establishing A Shared Value System

Golden, J.P. (2002). Values Arrangement List: Understanding Your Personal Values. Retrieved from http://www.goldenllc.com/pdf/UYPV.pdf.

McKinley, D. (1995). Shared values among couples as a prognosis for marital satisfaction. Retrieved from ProQuest Dissertations & Theses Full Text. (9734490)

Rowbotham, K., Budworth, M., Enns, J. R. (2008). Shared identity and strategic choice in dual-career couples. Gender in Management: An International Journal, 23(2), 103-119. doi: http://dx.doi.org/10.1108/17542410810858312.

appendix

Central node: **FAMILIAL RELATIONSHIPS & EXPERIENCES**

Main branches: LEISURE, LIFE CHANGES (MAJOR EVENTS), LEARNING/DEVELOPMENT, LIFE STAGES, INFLUENCIAL ISSUES, ROUTINES

Initial Exploration. To begin exploring and narrowing down my thesis topic, I created a series of mind maps, looking at potential topics in familial relationships, as well as multiple transitions involving relocation.

Who Cohabitates?

1990: 3,155,400 couples cohabiting,
2000: 5,218,492 couples cohabiting,
2008: 6,212,762 couples cohabiting

- 44% of adults (and more than half of 30- to 49-year-olds) say they have cohabited at some point

- There was a 13% increase in couples living together from 2009 to 2010. Eventually they attributed the sharp increase to the recession: these newly formed couples were less likely to have jobs. So, people are living together because they don't have enough money to live alone, but they aren't going to get married until they have enough money.

- The percentage of women in their late 30s who report having cohabited at least once rose from 30% in 1987 to 48% in 1995.

- Cohabitation tends to be selective of people of slightly lower socioeconomic status, usually measured in terms of educational attainment or income (Bumpass & Lu 1999, Nock 1995, Thornton et al 1995). The percentage of 19- to 44-year-old women who have cohabited at some point is almost 60% among high school dropouts versus 37% among college graduates (Bumpass & Lu 1999).

- Cohabitation tends to be selective of people who are slightly more liberal, less religious, and more supportive of egalitarian gender roles and nontraditional family roles.

- Recent data show that 45% of white and black and 40% of Latino women ages 19–44 have cohabited

individual goal attainment

religious adherence

CULTURAL CHANGES

ECONOMIC DRIVERS

- broader changes caused by industrialization
- women's changing roles
- shifts in attitudes about gender roles

Drivers in the Increase in Cohabitation
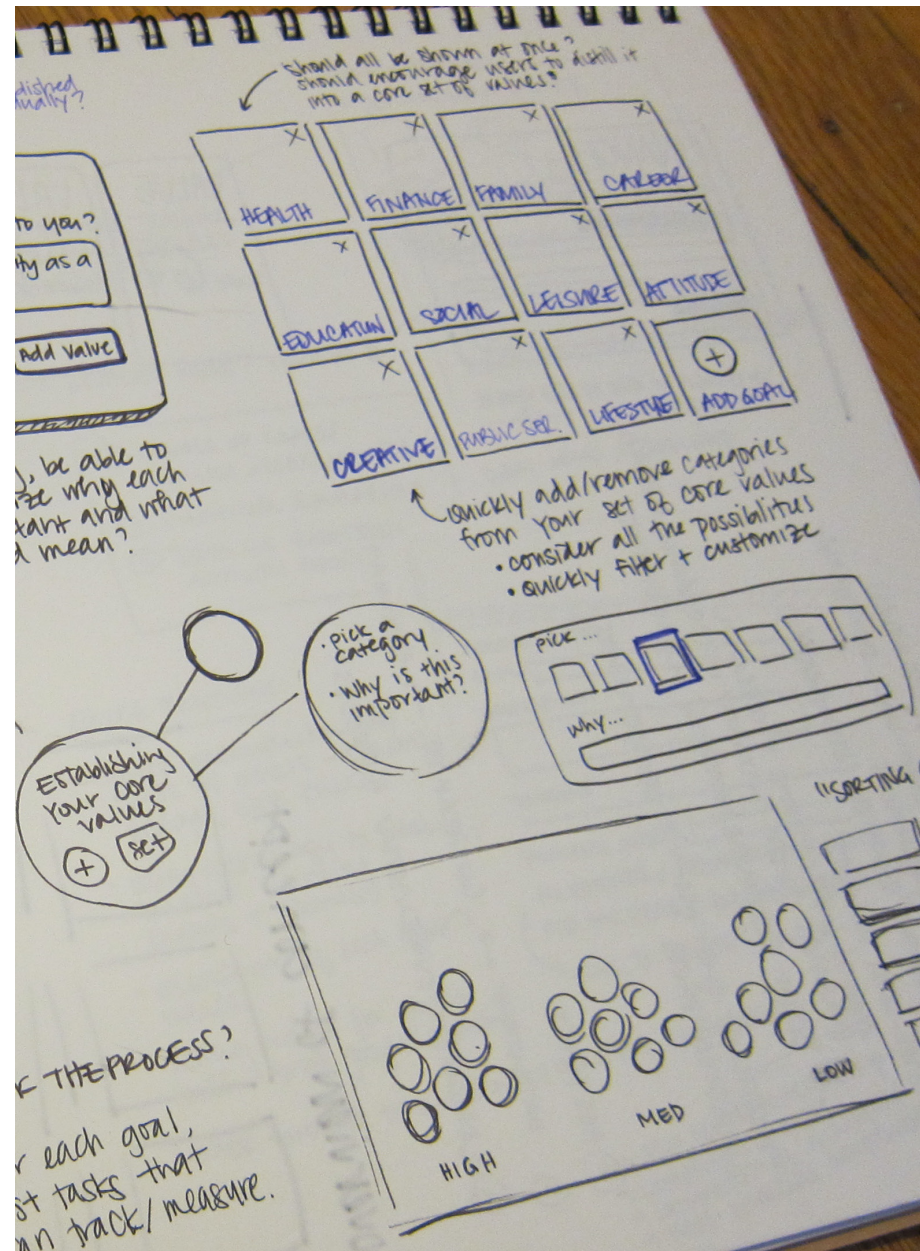
THE "SEXUAL" REVOLUTION

"FEEDBACK LOOPS"

removal of the stigma surrounding sexual relations before marriage

high aggregate levels of marital disruption show people through observation or experience that marriage may not be permanent

Process Diagrams. Sketching and mapping out the process helped me map out the overall information design of the service, as well as how information is laid out and presented.

SHARED GOAL-SETTING PROCESS

1. ESTABLISH YOUR CORE VALUES
what are the categories and values that are important to you and your relationship?

2. ESTABLISH A SHARED SET OF VALUES
Share these values with each other. Discuss what overlaps and what doesn't, and together, come up with a shared set of values.

3. SET GOALS THAT REINFORCE YOUR VALUES
Create a set of goals (individual/collective) that will reinforce these shared values in your relationship. What do you hope to accomplish within the next – 3 months, 6 mths, 1 yr, 3yrs, 5yrs?

4. VISUALIZE AND MAKE GOALS S.M.A.R.T.
use images to visualize what success might look like. Write and establish goals that are realistic and measurable, with deadlines to drive progress.

5. TRACK PROGRESS OF GOALS
what tasks or actions are needed to achieve these goals? How can we leverage technology to reduce inputting into and make track progress easier (i.e., connect bank accounts, foursquare, Nike+, fitbit, Instagram, calendars, e-mail, to-do lists, etc.)

6. KEEP GOALS FRONT OF MIND & RE-VISIT OFTEN
Display progress/goal status in common areas that you encounter daily. Use triggers to re-visit goals often and adjust as needed, and provide access individually on mobile devices.
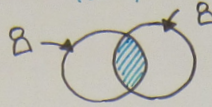
7. TRACK PROGRESS WITH VISUAL UPDATES. visual updates
Progress meters track measurable results.
through images, media, journal entries, etc. can motivate
provide a sense of accomplishment. use these to
_____ and renewing goals.

CATEGORIES (Actualized values)
career   social   creative   Lifestyle
Financial   Leisure   Public Service
Education   Attitude   Relationship
Family   Health & Fitness Spirituality

Financial
Career/Education
Family/Relationship
Leisure/Social
Health/Lifestyle/Wellness
Extracurricular – creative
                  service
                  Spirituality

SHARED VALUES

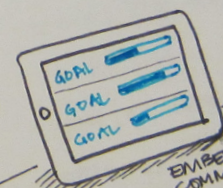As relationship progresses, the shared timeline continues to get built out.

3 MTHS   6 MTHS   1 YEAR   3 YEARS   5 YEARS

need to periodically reassess goals (operational values)

S Specific (or Significant)
M Measurable (or Meaningful)
A Attainable (or Action-Oriented)
R Relevant (or Rewarding)
T Timebound (or Trackable)

TRACK PROGRESS
• set-up a shared financial acct – link to personal
• link to tracking tools – Nike+, fitbit
• link to social sharing apps – Foursquare, Instagram, Twitter, Facebook
• link to productivity tools – calendars, to-do lists, e-mail, evernote

SET TASKS

GOAL
GOAL
GOAL

EMBEDDED IN COMMON AREAS

better for tracking individual goals